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PROCEEDINGS & TRANSACTIONS

OF THE

CROYDON

NATURAL HISTORY AND SCIENTIFIC

SOCIETY.

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BRITISH MUSEUM NATURAL HISTORY

PROCEEDINGS

OF

THE CROYDON NATURAL HISTORY AND SCIENTIFIC SOCIETY.

1908—1909.

Thirty-ninth Annual Meeting.

Held at the Public Hall, Croydon, January 19th, 1909.

The President, BALDWIN LATHAM, M.I.C.E., M.I.M.E., F.G.S., F.S.S., F.R.Met.Soc., in the chair.

The Council's Report and the Statement of Accounts for 1908 were read and approved.

The following gentlemen were elected Officers of the Society for the ensuing year:—

President.—J. EDMUND CLARK, B.A., B.Sc., F.G.S.
Vice-Presidents.—F. CAMPBELL-BAYARD, LL.M., F.R.Met.Soc.; BALDWIN LATHAM, M.I.C.E., F.G.S., &c.; W. F. STANLEY, J.P., F.G.S., &c.
Hon. Curator.—N. F. ROBARTS, F.G.S.
Hon. Lanternist.—J. H. BALDOCK, F.C.S.
Hon. Librarian.—ALFRED ROODS.
Hon. Treasurer.—F. J. TOWNEND, 29, Woodstock Road.
Council.—T. F. CLARKE; E. A. DAVIES; Dr. T. A. DUKES, B.Sc.; C. C. FAGG; F. GOSSLING, B.Sc., F.C.S.; L. STANLEY JAST; Dr. H. FRANKLIN PARSONS, F.G.S.
Hon. Secretary.—GEORGE W. MOORE, 15, Dornton Road, South Croydon.

The following ladies and gentlemen were elected members of the Sectional Committees:—

Anthropological and Archæological Committee.—T. F. CLARKE, "Lurline," Blenheim Crescent; J. M. HOBSON, M.D., B.Sc., Woodside Court, Croydon; E. LOVETT, F.R.H.S., West Burton, Outram Road; N. F. ROBARTS, F.G.S., 23, Oliver Grove, South Norwood; A. TARVER (Secretary), 7, Stuart Road, Thornton Heath.

Botanical Committee.—J. EDMUND CLARK, B.A., B.Sc., F.G.S., "Asgarth," Riddlesdown Road, Purley; P. COCHRANE, 13, Marlow Road, Anerley; H. T. CROSFIELD, B.A., 49, Coombe Road; Miss K. JEFFRIES DAVIS, B.Sc., 86, Lansdowne Road; C. C. FAGG, 34, Church Road, Upper Norwood; Miss KLAASSEN (Secretary), Aberfeldy, Campden Road; H. T. MENNELL, F.L.S., Red House, Park Hill Rise; W. H. MORRIS, 1, Walpole Road; H. FRANKLIN PARSONS, M.D., F.G.S., Oakhyrst, 4, Park Hill Rise; Mrs. PARSONS, Oakhyrst, 4, Park Hill Rise.

Geological Committee.—W. BRUCE BANNERMAN, F.S.A., F.G.S., The Lindens, Sydenham Road; T. F. CLARKE (Secretary), "Lurline," Blenheim Crescent; F. GOSSLING, B.Sc., F.C.S., 15, Birdhurst Road; G. J. HINDE, Ph.D., F.R.S., F.G.S., 24, Avondale Road; H. C. MALE, M.D., Cromer Lodge, 74, Birdhurst Road; G. W. MOORE, Bryndhurst, Dornton Road; T. K. F. PAGE, 9, Rosemount, Wallington; H. FRANKLIN PARSONS, M.D., F.G.S., Oakhyrst, 4, Park Hill Rise; N. F. ROBARTS, F.G.S., 23, Oliver Grove, South Norwood; W. WHITAKER, B.A., F.R.S., F.G.S., Freda, Campden Road.

Meteorological Committee. — F. CAMPBELL-BAYARD, LL.M., F.R. Met. Soc. (Secretary), Cotswold, Wallington; J. EDMUND CLARK, B.A., B.Sc., F.G.S., "Asgarth," Riddlesdown Road, Purley; BALDWIN LATHAM, M.I.C.E., F.G.S., &c., Park Hill House, Stanhope Road.

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Museum Committee.—T. F. CLARKE, "Lurline," Blenheim Crescent; J. M. HOBSON, M.D., B.Sc., Woodside Court, Croydon; L. STANLEY JAST, Central Library, Town Hall; E. LOVETT, F.R.H.S., West Burton, Outram Road; H. T. MENNELL, F.L.S., The Red House, Park Hill Rise; H. FRANKLIN PARSONS, M.D., F.G.S., Oakhyrst, 4, Park Hill Rise; N. F. ROBARTS, F.G.S. (Secretary), 23, Oliver Grove, South Norwood; W. W. TOPLEY, 46, Friends Road; W. WHITAKER, B.A., F.R.S., F.G.S., Freda, Campden Road.

Photographic Committee. — J. H. BALDOCK, F.C.S. (Lanternist), Overdale, St. Leonard's Road; H. D. GOWER, 55, Benson Road; R. F. GRUNDY, 8, Havelock Road; J. M. HOBSON, M.D., B.Sc., Woodside Court, Croydon; A. ROODS, 67, Thornhill Road; W. W. TOPLEY, 46, Friends Road.

Zoological Committee.—T. F. CLARKE, "Lurline," Blenheim Crescent; H. T. CROSFIELD, B.A., Walden, 49, Coombe Road; STANLEY E. HALL (Secretary) 17, Dornton Road, South Croydon; G. W. MOORE, 15, Dornton Road, South Croydon; Dr. H. FRANKLIN PARSONS, M.D., F.G.S., Oakhyrst, 4, Park Hill Rise; A. TARVER, 7, Stuart Road, Thornton Heath.

Council's Report, 1908.

At our last annual meeting, held on January 21st, 1908, we had to report a considerable reduction in the number of our members, and we regret that this has continued, the total at present being 141.

We regret the loss of two members by death: Mr. J. Corry, J.P., February 17th, 1908, and Rev. R. K. Corser, August, 1908. Resigned, 30. Struck off, 2. The new members elected during the year number 12.

In respect of these figures, which all who desire to see the Society continue successfully must deplore, we desire to make an appeal to all the members to try and induce friends to join. There is much to be done by a Society of this kind, by the mere fact of uniting those who are interested in the objects for which such a Society exists, that otherwise would be left; and in many ways, as shown by the reports of the different Sections, which will appear in due course, much is being accomplished.

The monthly meetings have, as a rule, been well attended, and the sectional meetings, in some cases, very fully so, though it is regretted that in some others, though those responsible for the meetings have prepared matter of an interesting and instructive nature, there has been a falling off. The object of these meetings is avowedly educational, and members are desired to bring subjects for discussion. Reports of the meetings and excursions will be printed.

It has been necessary to give up the dark room, as the anteroom to the lecture room in which we hold our meetings is required for other purposes by the company from whom we rented it; moreover, it was found that for some time very little use had been made of it. We ceased having the use of the dark room on November 1st.

The thanks of the Council and the members are due to all the Sectional Secretaries for all they have done in keeping up the special work of their Sections, and to all who have assisted in the work of the Society in other ways.

The issue of the 'Transactions' for 1907 has unavoidably been delayed, but they are now being prepared, and it is hoped will be ready soon.

Particulars of meetings held are given under the Summary of Proceedings, and of sectional meetings under the respective Section Reports.

President's Address.

INFLUENCE OF THE SOIL AND GROUND WATER UPON HEALTH.

By Baldwin Latham, Mem.Inst.C.E., Mem.Inst.M.E., F.G.S., F.S.S., F.R.Met.Soc., &c.

In the author's Address of last year he pointed out that all the epidemics of fever which had occurred in Croydon had been associated with particularly low states of the ground water; that generally the health of Croydon had always suffered in the past at periods following or at the time of excessive droughts.

In considering what subject the author should take for his Address this year, he came to the conclusion that it was desirable to continue the observations which he had the opportunity of making in his Presidential Address last year.

In connection with the questions of soil and ground water, a great number of observations have been carried on by the author in Croydon with reference to the temperature of the air, and of the ground at various depths, the height of the subsoil water, the amount of water percolating and the period when percolation has taken place, and the amount of evaporation and condensation.

It was in consequence of knowing the influences which were at work that the author was led to consistently oppose the efforts of the Authorities to seek for purer sources of water supply when he knew that those sources were not likely to bring about the desired result, but were liable to produce all the evil consequences in a modified form which have from time to time occurred in Croydon in the past when the conditions became favourable.

At the present day we have more intimate knowledge of what takes place in the ground than at any previous period. From time immemorial there has always been a sort of tacit understanding that the earth did exercise a certain influence upon health, whether the ground was dry or wet, or whether it consisted of rock, gravel, clay, sand, or peat. Our distinguished past President, Mr. William Whitaker, F.R.S., has taken part in an inquiry which shows the relation of dampness of the soil and the prevalence of phthisis in this country.

It was not until the year 1876, when Messrs. Schloesing & Muntz were appointed to inquire into the sewage irrigation works for the disposal of the sewage of Paris, that these two chemists discovered that the earth was teeming with organic

life, and that the action of certain microbes in the soil which they discovered had a most marked influence in destroying or changing organic matters in the soil, so as to render such matters innocuous; in fact, the process of nitric fermentation took place analogous to the "Mycoderma aceti," and that these organisms decompose the organic or ammoniacal substances containing them, combining them with oxygen producing nitric acid, which in its turn by combining with the constituents of the soil produce what are supposed to be harmless nitrates. These fermenting organisms were isolated by the discoverers, their vitality being proved, and the results were published for the first time in 1877. It was found that so numerous were these beneficial organisms in the soil that a gramme of Paris soil contained 1,300,000 organisms. This nitrifying organism has, not inaptly, been called the "friendly" microbe.

Subsequent investigations took place in this country, and in the laboratories of Messrs. Lawes & Gilbert at Rothampstead, which showed that these organisms, although ever at work, were confined to a short distance below the surface of the soil.

The effect therefore of storing organic matters in deep cesspools in the chalk in the upper portion of the watershed of the river Wandle, which has been going on for a long period, where there are no microbes to change the deleterious matters into a harmless compound, is that there is always a liability of the escape of some noxious substance into the water supply of the district, and it must not be overlooked that the specific organism of enteric fever under certain conditions of moisture, temperature, and pabulum, does exist in the soil. In olden times the outbreak of epidemics was ascribed to the wrath of God instead of the violation of God's laws. A bountiful Providence has provided for the welfare of man and the safe-guarding and protecting him from the evil consequence of his own actions, and it is truly marvellous that it is only for the most flagrant transgressions that he suffers, and the ground becomes poisoned from his actions, which is the cause of most disease. It will scarcely be credited in years to come that for generations many of the inhabitants of towns of this country have stored or put into the ground in the immediate vicinity of their habitations matters which tend most seriously to interfere with their health.

In the Sixth Report of the Royal Commission on Pollution of Rivers we have given an analysis of the water in the Caterham Waterworks Well at the top of the Croydon drainage area, and of the water in the Croydon Waterworks wells at the bottom of the drainage area, and the results show in a marked degree the pollution and purification of the underground waters

in passing down the valley. The total combined nitrogen in the Caterham well is given as ·033 parts in 100,000, while in the Croydon well it is given as ·559 parts in 100,000, or about seventeen times as much as in the Caterham well; and further, the report sets out that there is no previous sewage pollution in the Caterham well. The previous sewage pollution of the Croydon wells was 5280.

In order to understand the serious influences which can arise from the polluted earth, it is only necessary to study the conditions which occur from time to time, and it is a curious fact that nearly all the epidemics which occur amongst the human race occur with perfect regularity at certain seasons of the year with a periodicity that cannot be accounted for by infection or contagion, and destroy a vast number of persons in some seasons and but few in another, and are governed more or less by temperature and percolation. The late Dr. Farr, in the reports of the Registrar General, has pointed out that neither contagion nor infection will account for the propagation of epidemic disease, as he said that "the facilities of intercourse and the frequency of contact with the sick are not greater when the disease is increasing or at its height than when it is stationary or declining." Therefore, in addition to the particular cause of disease, there are conditions which either cause it to increase or diminish totally, apart from any question of contagion or infection.

In respect of the influence of contagion and infection, it should be observed that the increased communication which has been brought about between different places by the opening of railways in this country since the year 1830, or the introduction of the Penny Post in 1840, has not brought about an increase in communicable diseases; but, on the other hand, these diseases have diminished, but still show the same periodicity as occurred before increased communication was established.

It has been said that by means of observations carefully made and recorded, the remedy may be found to prevent these outbreaks of disease.

In the investigation of the cause of disease, the author has for some years past carried out numbers of observations which show that in every year there is a change in the direction of the movement of the air into and out of the ground. There is a movement into the soil by the percolation of rain, which usually commences in the autumn and continues to the spring. There is also a movement out of the soil due to exhalations from the ground, commencing in the spring and continuing until the autumn. The diurnal changes of temperature of the soil have an effect in expelling ground air, and also of drawing

fresh air into the soil. The effect of percolation is also to expel ground air from the soil and cause fresh air to enter. The period of the first exhalations from the earth is usually an unhealthy period. The first period of percolation of water through the earth after impurities have accumulated, especially after a long drought, is usually a very unhealthy period, and those districts which are densely built upon and where the earth is liable to considerable pollution are the places in which the influences are most felt. It has generally been supposed that epidemic diarrhœa is closely connected with the temperature of the soil, and that when the soil at four feet in depth arrives at a temperature of 56° Fahrenheit diarrhœa commences. No doubt infantile diarrhœa is associated with temperature, but in the author's opinion it is due more to the temperature of the drinking water supply than to that of the earth. Any water which has been in contact with the ground, and contains even the oxidized remains of organic matters, will, when heated to a certain temperature, cause diarrhœa in infants when such water is taken in what the ancients called its "raw" condition. The temperature of a water supply when delivered through mains to the respective houses is the temperature of the ground at the depth at which the mains are laid, and not the temperature of the water at its source, and, as a rule, it is found that epidemic diarrhœa is most rife in those districts in which the water supply is distributed direct from the mains, the water in which has arrived at a considerable temperature. It has been the author's practice every day for over thirty years to take the temperature of Croydon water direct from the mains, and while the temperature of the water within the wells at the Old Town varies somewhat, as is shown in the author's Address of last year, it is nothing like so variable in temperature as the water which is distributed from the mains in the district. The present average temperature of the water in the waterworks wells varies from 51° to 52°, and the average monthly temperature of the water as distributed has varied from 63½° in July, 1881, to 38·2° in January, 1891, and the extremes of course have gone both higher and lower than these figures.

The temperature of the ground of course has a most material influence in causing the exhalations which take place from the ground, and which in a very great measure are the cause of some diseases. Some years ago, when the plague first broke out in Bombay, the author directed attention to this matter, that the plague was directly influenced in Bombay, as it must have been in this country when it was rife here, by direct exhalation from the polluted ground, and that there is a regular periodicity in the time when the plague was rife both in this country and abroad. In Bombay and some other parts of India

the plague occurs at a totally different period of the year to what it used to occur when it was rife in this country, but the conditions which led to exhalation from the ground only occurred at the periods of the year when the plague was rife in this country and in Bombay.

The diagram No. 1 shows what is the exhalation taking place due to the temperature of the ground at five feet in depth in Bombay, and the number of deaths which occurred each month, added up from the weekly returns as published at the time in the Bombay newspapers. It will be seen what a remarkable conformity there is between the lines of exhalation or evaporation from the ground as compared with the deaths occurring, the one preceding the other with perfect regularity, and the intensity of the disease pretty well following like cause and effect.

The mode in which the evaporation or exhalation from the ground has been ascertained was by making use of the late Dr. Pole's formula for evaporation, which is as follows:—

$$E = \frac{T^2 - t^2}{A\ (100 - W)}$$

T. Temperature of the ground.
t. Temperature of the dew point.
W. Wind, miles per hour.
A. Co-efficient. Taken for Bombay at 80.
E. Evaporation or Exhalation, depth per day in inches.

In order to calculate the amount of vapour escaping from the ground, it is necessary that the dew point should be known.

In 1898 the author commenced a series of observations, with a view, if possible, of getting at the dew point in some simple manner, which is necessary for purposes of determining the amount of evaporation which takes place from time to time from the surface of the earth. Hitherto observations for ascertaining the dew point have been taken in a Stevenson's stand by calculating the difference of the reading between the wet and dry bulb thermometer at 9 a.m. and 9 p.m. At Greenwich, of course, the observations are taken by means of photographic records, and the hourly averages are published each month in the Greenwich records. Few private observers can carry on such an elaborate system as that carried out at the Greenwich Observatory, but in order to get the results, it occurred to the author that he might use a maximum recording dry and wet bulb, and a minimum recording dry and wet bulb thermometer giving the maximum and minimum dew points, and the mean of these observations would give somewhere near the true dew point. The result of these observations, which have been taken

daily for the ten years 1899 to 1908, show that, while the mean temperature of the air at Croydon has been 50·17°, the mean temperature of the dew point, as ascertained by the four recording thermometers, in these ten years has been 43·19°. At Greenwich, in the same ten years, the mean temperature of the air was 49·84°, and the mean temperature of the dew point was 43·31°.

It will therefore be seen that the differences between the dew point and the mean temperature of the air at Croydon has been 6·98°; at Greenwich it is 6·53°, showing that in this simple mode of ascertaining the dew point we have a valuable auxiliary observation to the ordinary observations, and that for all practical purposes such observations may be taken as giving the correct value of the dew point.

For many years the author has carried out observations on the temperature of the ground at Croydon, but with reference to them he should say that of course, as he has moved his residence several times during the period the observations have been going on, it is only right to say that one set of the observations cannot absolutely compare with another set at a different elevation.

The following figures are the results of observations which were carried on at the same place at Park Hill for the ten years 1880 to 1889, at an elevation of 260 ft. above Ordnance Datum :—

TEMPERATURE OF GROUND, CROYDON, AT 260 FEET ABOVE ORDNANCE DATUM.

	Mean Temperature.	Average of Monthly Maximums.	Average of Monthly Minimums.
Air	48·99	62·18, July	36·89, Jan.
6″ Ground	50·26	74·36, July	33·60, Jan.
2·5 ft.	50·25	61·97, July	40·10, Jan.
5 ft.	50·15	59·89, Aug.	41·96, Feb.
10 ft.	49·76	55·55, Sept.	44·59, March
15 ft.	49·44	53·01, Oct.	46·05, April
20 ft.	49·90	51·96, Nov.	47·88, May
25 ft.	49·91	50·95, Dec.	48·91, June
30 ft.	50·19	50·78, Dec.	49·55, July
35 ft.	50·45	50·66, March	50·22, Sept.
40 ft.	50·48	50·58, May	50·39, Oct.
45 ft.	50·40	50·43, June	50·33, Jan.
50 ft.	50·46	50·49, July	50·42, Jan.

From these observations it will be noted that there is only a slight amount of variation in a year in the average temperatures at different depths; that the mean temperature at any one depth does not differ very much from the mean of any other depth. The mean of all the temperatures from 6 in. to 50 ft. is 50·14, and the deviation from this mean is greatest at 15 ft., and is $-0{\cdot}70°$, and at 50 ft. the deviation is $+0{\cdot}32°$.

At the time these observations were being made the author also had some observations made in the yard contiguous to the waterworks at Croydon, which show that the temperature of the ground at the same depths, say 25 ft. and 50 ft., did not fluctuate to the same extent as it did upon the high ground at Park Hill. This no doubt is due to the fact that at the low position, at a level of 150 ft. above Ordnance Datum, at a place adjoining the waterworks in which these observations were taken, the mean temperature would be higher, as it is generally assumed that the temperature diminishes as we go upwards, one degree for about every 300 ft., but it should be noted that the temperatures did not fluctuate to the same extent. This in all probability is due to the subsoil being charged with water, which produced a much more uniform temperature of the ground.

The mean temperature of the ground at Park Hill at 25 ft. deep for five years, 1880–84, was 49·85°. The highest mean monthly temperature was 50·91° in December, and the lowest mean monthly temperature 48·94° in June. The mean temperature at 25 ft. deep in the ground adjoining the waterworks yard in Surrey Street for the same years was 51·28°. The maximum temperature was 51·47° in both October and November, and the minimum temperature 51·13° both in April and May. At 50 ft. in depth the mean temperature in these years at Park Hill was 50·19°, and at the waterworks 51·17°. The maximum was 50·20° at Park Hill, and at the waterworks 51·24°. The minimum was 50·14° at Park Hill, and 51·14° at the waterworks.

It is generally assumed that in underground observations the temperature of the ground is always to be taken as one degree higher than the mean temperature of the air. This does not quite agree with the author's Croydon observations, as the temperature of the air at Croydon in ten years, 1880 to 1889, averaged 48·99°; while at 40 ft. deep the temperature was 50·48°, and at 50 ft. the temperature was 50·40°.

Looking at the temperature of the ground, it is questionable whether the seasonal fluctuation in temperature does pass into the ground to a greater depth than certainly 50 ft. Temperatures have been taken at Greenwich at depths varying

from 1 in. to 25·6 ft., which are shown by the following figures :—

TEMPERATURE OF GROUND, GREENWICH.

Depth.	Mean Temperature.	Maximum Monthly Temperature.	Minimum Monthly Temperature.
1 in.	51·97	65·44, July	40·38, Jan.
3·2 ft.	51·19	62·48, Aug.	41·69, Feb.
6·4 ft.	51·69	59·65, Aug.	44·80, March
12·8 ft.	50·89	55·77, Sept.	46·43, April
25·6 ft.	50·56	52·22, Nov.	48·95, June

Mean temperature of the air, at Greenwich, forty-six years, 49·4°.

Highest 62·2°, July. Lowest 38·5°, January.

It will be observed that in the author's record the month of the year in which the maximum and minimum temperatures were observed is given; that the temperature of the air was on the average greatest in July, and lowest in January. The same applies to the temperature of the ground at 6 in. in depth. At 2 ft. 6 in. deep the temperature is warmest in July, and coldest in January. At 5 ft. in depth it is warmest in August, and coldest in February. At 10 ft. deep it is warmest in September, and coldest in March. At 20 ft. in depth it is warmest in November, and coldest in May. At 25 ft. deep it is warmest in January, and coldest in June. At 30 ft. it is warmest in January, and coldest in July. At 40 ft. it is warmest in June, and coldest in October; and at 50 ft. deep it is warmest in July, and coldest in January to March.

In the year 1867 a Committee of the British Association was appointed to investigate the rate of increase downwards of underground temperature, and after issuing many reports, the result of the first fifteen reports was given in the year 1882, and the observations show extremely variable results, from an increase of one degree to every 130 ft., to one degree for every 34 ft., and a mean of one degree for 64 ft. The nearest stations to Croydon were the Kentish Town well and Richmond well. The Kentish Town well gave an increase of one degree for every 55 ft. The well at Richmond gave one degree for every 52·4 ft. for a depth of 1337 ft., and one degree for 45·1 ft. for 1447 ft. In none of these observations has the zone which is affected by atmospheric influences been deducted, which the

author considers ought to have been, which would somewhat modify the temperature, and in this neighbourhood the first 50 ft. ought to be deducted.

The late Professor Prestwich gave the figure of increase in underground temperature as one degree for every 45 ft. in depth. It is important to know the fact of this increase of underground temperatures, as it can be shown by the temperature of water taken from a well whether or not the well is yielding any water from a great depth. For instance, in the Corporation wells, which have been sunk to a very considerable depth, there is no increase in temperature of the water from these deep borings, and consequently it is quite clear that there can be no water flowing from the greater depth, otherwise the water would have its proper increase of temperature, and therefore it is a piece of wilful waste of money to go on making deep borings that yield no water, when the slightest observation would show that there is not the least increase of water by going to these greater depths.

With reference to the question of elevation of the ground, there is no doubt that there are some diseases in which the specific germ or poison is lighter than the water by which it is conveyed, such as in the case of typhoid fever, to which reference has been made in the author's Address of last year; but in the case of cholera, the germ is evidently heavier than water, and tends to gravitate to the lowest places, and consequently elevation of the ground has a material influence upon the distribution of this disease. The late Dr. Farr produced a formula by which, knowing the death-rate from this disease at one elevation, the deaths at another altitude could be calculated.

The following figures show the results of the epidemics of cholera in London for the years 1849 and 1854, as worked out by Dr. Farr, and recorded in the Registrar General's Reports:—

Elevation. Feet.	Deaths from Cholera.		Population.
137	13	in	10,000
88	15	,,	,,
69	26	,,	,,
48	31	,,	,,
31	49	,,	,,
5	96	,,	,,

With regard to the influence of percolation upon health, the following figures show what have been the deaths in Croydon since 1837 to the end of 1905:—

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Total Deaths, Croydon ..	7558	6206	6559	6252	5671	4771	5475	6091	5547	5483	5782	6709
Deaths, * Diarrhœa..	64	56	55	61	76	82	401	1122	740	282	101	65
Deaths less Diarrhœa..	7494	6150	6504	6191	5595	4689	5074	4969	4807	5201	5681	6644

It will be seen that the total deaths are given, and also the deaths from diarrhœa, which have been deducted from the total deaths. It must be borne in mind with reference to those deaths that February appears to stand lower than it ought in its position. This is entirely due to the shortness of the month, and if a proper addition was made to it in order to bring it up to an equal length with other months, it would come out in its right position, showing that the month of January is the month in which most deaths have occurred, and that June is the month when the least deaths have occurred, and that with deaths from diarrhœa the month of August is the most fatal. From June there is an increase of deaths right away to January, and from January a regular decline to June again.

The percolation for January is the largest in any one month, but February would nearly equal it if the month were of equal length. The results of observations on percolation which have been made by the author have recently been presented, with other observations upon evaporation and condensation which have been carried on for the last thirty years, to the Royal Meteorological Society.

With reference to the influences of temperature, of course there is no doubt that low temperature to a certain extent kills off some old people, while high temperatures kill off the infants; but temperature has certainly nothing like so potent an influence upon the death-rate as percolation.

In recent years the most unhealthy months which have occurred in Croydon have been January, 1892, and January, 1900. In the former year 314 deaths occurred in the month of January, and in 1900 321 deaths occurred in January. This would give, respectively, annual death-rates of 35·5 in 1892, and 29·4 in 1900. In the coldest month that has been recorded in Croydon, namely, Frebruary, 1895, when the mean temperature for the month was 28·5°, the deaths were 187, and the death-rate 19·54. The temperature in January, 1892, was 36·6°; in January, 1900, it was 39·8°.

* Not including deaths from enteritis or epidemic enteritis, or gastritis.

With reference to percolation, the author has prepared a diagram No 2 which shows the deaths of children under five years of age, both in Croydon and in Croydon water district, separately, from the year 1876 to 1905, and in conjunction with it he has plotted the actual depth of water flowing off the drainage area year by year, at the end of each year. He has also placed upon it the low-water levels of the wells at the 'Rose and Crown' at Coulsdon, and at Tudor Cottage at Purley Junction. He may say with reference to the deaths of children that they were arrived at from the number of deaths occurring, and the population at this particular age in the district, and that the death-rate is plotted downwards from the top of the diagram, while the water levels are plotted upwards from the bottom of the diagram, as at low-water periods the smaller quantity of water flowing off produces high death-rates among children, and therefore by plotting them on the opposite side of the diagram, they show the parallelism which would not be apparent otherwise, and they show how extraordinary are the results, that every fluctuation in the death-rate corresponds with the diminution in the quantities of water in the periods of dryness which occur in the strata contributing to the water supply of Croydon. These results have been continued up to the end of 1905, but the author regrets to say that the well on which he had carried on observations for so many years at Tudor Cottage has been filled up by its proprietor, in spite of the author's earnest entreaty that he would allow him to make provision so that the observations might be continued. This seems to be the end more or less of all these inquiries, as this is not the only well which has suffered a similar fate, and observations of the greatest possible value to the neighbourhood have been brought to a termination by the owners of the properties either filling up or covering over the wells, and not permitting any further observations to be made. The percentage of deaths of infants under one year of age to the total births in the district absolutely follows in parallel lines the heights of water in the ground as shown on diagram No 2.

There has also been the establishment of waterworks by the East Surrey Company at the junction of Godstone and Brighton Roads, which of course have a material effect in lowering the water and apparently producing an artificial lowering which is not really taking place, but which has some influence by depriving some of the waterworks of the Corporation of Croydon of the water they otherwise would get.

It will be noted that, since the introduction of a supply of water from Addington and other places into the town, the diagram of deaths of children under five years of age shows a reduction in the death-rates, upon which the authorities may

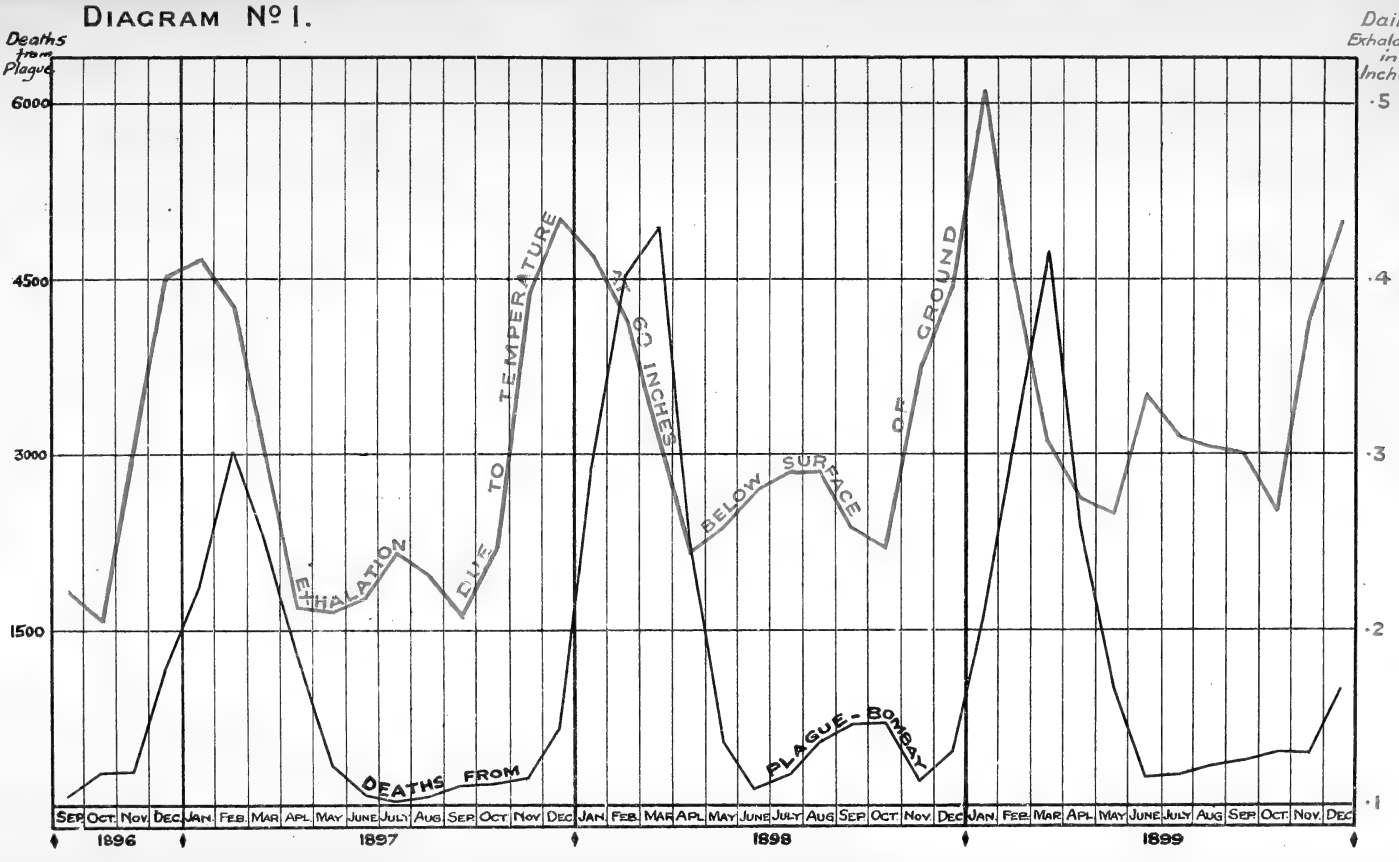
DIAGRAM Nº 1.
Deaths from Plague
Daily Exhalation in Inches
6000
4500
3000
1500
·5
·4
·3
·2
·1
EXHALATION DUE TO TEMPERATURE AT 60 INCHES BELOW SURFACE OF GROUND
DEATHS FROM PLAGUE - BOMBAY
SEP. OCT. NOV. DEC. JAN. FEB. MAR. APL. MAY JUNE JULY AUG. SEP. OCT. NOV. DEC. JAN. FEB. MAR. APL. MAY JUNE JULY AUG. SEP. OCT. NOV. DEC. JAN. FEB. MAR. APL. MAY JUNE JULY AUG. SEP. OCT. NOV. DEC.
1896
1897
1898
1899
West, Newman lith.

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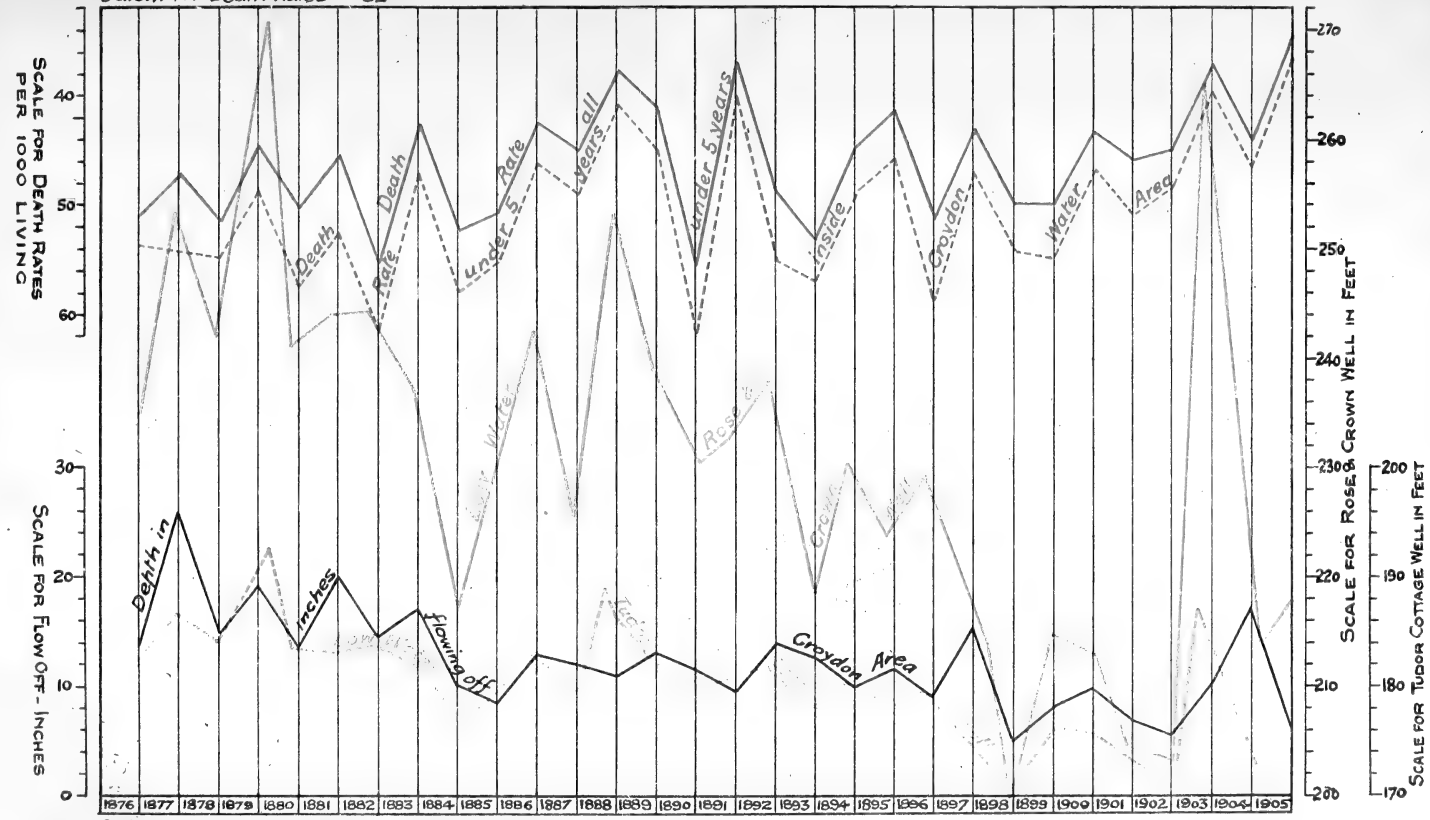
DIAGRAM No 2.



Datum – Rose & Crown Well – 200 Feet above Ordnance Datum
Tudor Cottage do. – 170 " " " "

West, Newman lith.

BRITISH MUSEUM
NATURAL HISTORY

congratulate themselves. The result thus secured, though small, shows how great might have been the improvement in health if the authorities had removed all pollution from the area contributing to their water supply, or sought other sources of water supply free from pollution.

Obituary Notice.

Henry Storks Eaton, M.A.

Mr. Henry Storks Eaton, whose death took place on Feb. 7th at Ilfracombe, was born on Oct. 30th, 1834, at Little Bredy, Dorset, of which place his father was curate. He went to school first at Somerton, and then to Dorchester Grammar School, and from there he proceeded, in October, 1854, to Trinity College, Cambridge. Whilst at Cambridge he attended some science lectures on botany, geology, and chemistry, but as there was then no Natural Science Tripos, he merely took the Ordinary Degree. From childhood he displayed a keen interest in meteorology, which lasted throughout his life. He was elected a member of the then Croydon Microscopical and Natural History Club on April 16th, 1879, and he straightway took a leading interest in its fortunes. His first paper, "On Meteorological Observations," was read on March 23rd, 1881, and this was followed by the "Report of the Meteorological Committee on the Temperature and the Rainfall of the Croydon District for the five years 1881–85" on May 12th, 1886. At the Annual Meeting on January 12th, 1887, Mr. Eaton was elected President of the Society, and in his Address, delivered January 11th, 1888, he alluded to the formation of the scheme for the publication of the daily rainfall of the Croydon district, which was inaugurated at a meeting of the Meteorological Sub-Committee held at Mr. Eaton's house on September 14th, 1887, and the commencement of the observations was fixed for January 1st, 1888. At the Annual Meeting on January 11th, 1888, Mr. Eaton was again, for the second time, elected President of the Society, and in his Address on January 9th, 1889, he mentioned, with feelings of pride and satisfaction, the successful launching of the scheme for the observation of the daily rainfall of the district. Soon after this Mr. Eaton left Croydon, but he continued to take an interest in the rainfall work of the Society to the end of his life, though he resigned his membership on December 31st, 1905. He was buried in the grave of the wife he loved so well at the Croydon Cemetery, Queen's Road, on Friday afternoon, February 12th, in the presence, amongst others, of Miss Klaassen and Messrs. Wm. Marriott, Baldwin Latham, and Campbell-Bayard.

Summary of Proceedings.

Excursions.

June 8th (Whit-Monday). — Excursion to West Hoathly, Sussex. Conductor, Mr. F. Campbell-Bayard.

The weather, which on Whit-Monday is often treacherous, and had this year been very threatening previously, proved excellent on this occasion—not too anything, but just perfect—enabling the thirteen members and friends, who went to West Hoathly, to enjoy a good walk without fatigue, and to obtain good and extensive views over East Grinstead to the north-east, Eridge and Saxonbury to the east across Ashdown Forest; while to the south-east Beachy Head and on the south-west Chanctonbury Ring were clearly visible. In August, 1905, a visit was paid to Eridge, where an exposure of the rocks of the Tunbridge Wells Sands (Hastings Sands) was seen, and the excursion this year was undertaken with a view of seeing similar rocks in the Lower Tunbridge Wells Sands, including "Great-upon-Little," to which a previous visit was paid in 1897.

On arrival at West Hoathly, arrangements were made for tea on returning at about five o'clock, and the party immediately started for Gravetye Manor, and in a very short time came upon an outcrop of the Lower Tunbridge Wells sandstone, similar to the rocks to be seen later at Rockhurst Park. Some views were taken of this exposure, in which there were some very fine examples of current bedding. On the rock here, as well as at Rockhurst, the trees showed ready adaptability to the conditions necessary for maintaining their position on the rocks where there was apparently but little hold.

A request had been sent to Mr. Robinson, of Gravetye Manor, to allow the party to see his gardens, and they were met by Mr. Robinson, who very kindly showed them through the grounds, which are stored with a choice collection of hardy flowers and shrubs, and pointed out the chief features. The house is Elizabethan, and extremely picturesque, some additions made to it being entirely in keeping with the original structure, while the gardens still present much of their old-world appearance, though probably less formal now that antiquity has added its charm, the old sundial and the stone copings to the beds being toned with age. Amongst his recent acquisitions, Mr. Robinson pointed out a pink single rose—a hybrid between a white Chinese and a dark American rose—with blossoms nearly four inches across, quite new to this country. Mr. Robinson took us to see a fine *Wistaria Japonica* out in full bloom, looking

very beautiful with its long pendulous blossoms. The house is situated in the centre of some of the old Sussex iron workings, and from one field near a very large quantity of slag and refuse from these had been obtained.

After leaving Gravetye, lunch was taken in a field near where some fallen timber afforded comfortable rest, and the party then proceeded to Rockhurst, where, by the kindness of Lady Farrant, the gardener was allowed to conduct the party through the park; and on the way to "Great-upon-Little" he pointed out the remains of an old Roman camp. "Great-upon-Little" is simply a mass of the sandstone rock, which here forms an escarpment on the side of a valley—isolated probably by the action of wind and storm from the main portion. It appears that the lower part of the rock is less indurated than the upper, and by the unequal wearing away the soft portion has been cut out like a stalk, while the harder masses above overlap, the circumference of the upper part being about double that of the lower. There is no appearance of any artificial or human work, although legend and some old books appear to ascribe its existence to this cause, and regard it as a Celtic monument or rocking-stone.* In course of time other masses may become similarly isolated as the softer parts of the beds are worn away, and the main line of the escarpment is carried back. There are similar rocks on the opposite side of the valley, and the problem presented is, How was the valley excavated and the mass of rock which formerly existed carried away? That much iron existed is evident from the quantities of slag from old workings which have been found on the spot, and several members brought away specimens.

On the way to the station a quarry was visited, in which some distinctly ripple-marked stone was found; but there was no time for a prolonged stay, especially as several members desired to visit the church, in the vestry of which there are some fine specimens of old Sussex iron tablets, while the church itself is very interesting. There was, however, but a short time available, as the members had to hurry on to get tea before returning by the train at 6.23 from West Hoathly, after a most enjoyable day.

Dr. Parsons contributes the following notes on the botany:—Though flowers were plentiful, the flora (the soil being sandstone and clay) did not present so great a variety of species as on our chalk downs, nor did it comprise many rarities in the way of flowering plants. In the meadows on the way to Gravetye the dyer's greenweed (*Genista tinctoria*) was plentiful.

* Article by Thomas Pownall in the sixth volume of the 'Archæologia an Ancient and Modern Architecture.' Jules Gailhaband, 1846.

This plant, which is like a small broom, does not occur near Croydon, but is common in some parts of the country on poor marly soils, and was formerly used for dyeing yellow, though now probably superseded. Fifty years ago in the West of England it used, under the name of "wood-wax," to be gathered in the fields for the use of the cloth manufacturers by the country-women, who found it hard work to pull up the tough wiry stems. In the same meadow grew the milkwort (*Polygala vulgaris*), with pink flowers: about Croydon the flowers are blue, or on the commons sometimes nearly white. The bugle (*Ajuga reptans*) was also found with pink as well as with blue flowers. On the shady sandstone rocks ferns were plentiful, including large patches of the little filmy fern (*Hymenophyllum Tunbridgense*), now, it is feared, extinct in the locality from which it takes its name. Some lichens, rare in the south-east of England, were also found on the sandstone rocks, *viz.* *Sphærophoron coralloides* and *fragile*, *Stereocaulon nanum*, and *Lecidea coarctata*.

August 3rd (Bank Holiday).—Excursion to Brockham, Betchworth, and Reigate. Conductor, G. W. Moore.

This was essentially a holiday excursion, and was thoroughly enjoyable as such, but the day being somewhat close, and the members who attended inclined to take matters easy, no attempt was made to go outside the route from Box Hill station to visit the quarries near Brockham or Betchworth. A route was taken through Betchworth Park to Brockham, and thence across the Mole to Betchworth and Reigate Common to the station, whence a return was made to Croydon by a somewhat early train. As conductor, I regret that I mislaid a memorandum of the excursion, and was unable, owing to leaving home, to write an account at the time. The chief interest was in the fine chestnut trees in Betchworth Park, and our visit to Betchworth Church. The route, however, was with hardly any exception very pretty, and the walk thoroughly enjoyed.

April 11th.—Victoria and Albert Museum, Geological Division. Conductor, G. W. Moore.

Very few members attended, but were amply repaid by seeing through the galleries, and in having the working models of physical phenomena put in operation. A visit was also paid to the Machinery Station, and to the South Kensington Art Collections.

May 9th.—Addington Park. Conductor, Mr. E. Ayerst Davies.

By kind permission of Mr. English this excursion was in place of one proposed to Monk's Orchard, West Wickham.

June 13*th.* — Limpsfield Chart. Ragstone and Hassock Quarries, Lower Greensand. Conductor, G. W. Moore.

June 27*th.*—Keston. With Geologists' Association.

July 18*th.*—Merstham, Pendhill, and Caterham. Prevented by inclement weather.

September 12*th.*—Fungus foray, Oxshott Common. Conductor, Dr. H. Franklin Parsons. (See Botanical Section Report.)

October 10*th.*—Beckenham. Conductor, Dr. H. Franklin Parsons, F.G.S. (See Geological Section Report.)

October 24*th.*—Worms Heath. Conductor, W. Whitaker, B.A., F.R.S. (See Geological Section Report.)

December 5*th.*—Beddington Brickworks.

Members of the Geological and Archæological Sections were invited to see an excavation at the Beddington Brickworks, Sandy Hill, Beddington (Messrs. Jesse Clack & Sons). A shaft has been found apparently built up in a pit of about 50 odd feet in depth, and 15 to 16½ feet in diameter, sunk through the Thanet Sand, and afterwards filled in round the shaft. At the base of the shaft a quantity of bones have been found, including, so far as at present has been ascertained, remains of horse, ox, dog, cat, pig, goat, a small and a large deer.

Evening Meetings.

February 18*th.*—Reading of Botanical and Meteorological Committees' Reports.

March 17*th.*—A very successful social evening.

April 28*th.*—"Some Prehistoric Sites in the Neighbourhood of Autun, France," by Mr. A. L. Lewis, illustrated.

May 19*th.*—"Notes on a Visit to Burmah," by Mr. T. F. Clarke, illustrated.

September 15*th.*—Exhibition of specimens found, and reading of notes made during vacation.

Dr. H. Franklin Parsons asked members to assist him in accumulating evidence as to the rate of growth of lichens, *e. g.* on tombstones, with the date on the tombstone.

October 20*th.*—Exhibition of lantern-slides, lent by Royal Meteorological Society, illustrating the effects of lightning, with note on a lightning discharge in Jamaica, by Capt. Alfred Carpenter, R.A. Mr. F. Campbell-Bayard, F.R.Met.Soc.

November 17*th.*—"Eolithic Implements in Surrey," by Mr. N. F. Robarts, F.G.S. (See "Transactions," Art. 28.)

December 15*th.*—Another successful social evening.

Report of Sections for 1908.

Botanical Committee.

During 1908 the Botanical Section has held a joint meeting with the Microscopical Section and has made evening excursions to places of botanical interest. The records of rare and interesting plants have been continued, and the number of plants in flower at Christmas has been recorded as heretofore.

Accounts of the various meetings will be found in the following report:—

On March 3rd Miss K. Jeffries Davies, B.Sc. Lond., read a paper on "The Structure and Development of Pollen Grains."

The following are notes of a short paper read to explain a number of slides shown at the joint meeting of the Microscopical and Botanical Sections.

The development of angiospermous pollen grains from the mother-cells can easily be traced in certain flowers with large anthers, *e.g.*, many *Liliaceæ* and *Ranunculaceæ*. In transverse sections shown of anthers of species of *Lilium* and *Helleborus*, different stages of karyokinesis can be observed. From each mother-cell four grains are usually formed, which become free from one another, but in certain plants, e.g., *Calluna*, *Acacia*, the grains cohere in groups of four, eight, &c. In most genera of *Orchidaceæ* the grains cohere to form the mass known as the pollinium. Ripe pollen-grains differ considerably in size and shape in different plants. A typical grain has two coats, the outer being often elaborate in structure; *Malva* and *Cucurbita* are interesting examples. Grains of species of *Tradescantia* when stained with acetic methyl-green show the nuclei well; in young grains one nucleus only is found, in older ones two nuclei are present, one belonging to the cell which becomes the pollen tube, the other to the cell from which the fertilizing bodies—or male cells—develop.

The germination of the pollen-grain on the stigma is easily observed in longitudinal sections of the style-branches of the evening-primrose (*Œnothera biennis*); staining with magenta renders the pollen-tubes visible as they pass down the tissue of the style. When a tube reaches the ovum in an ovule the male cells pass down it and the nucleus of one fuses with the nucleus of the ovum. Pollen-tubes can be produced artificially by placing the grains in solution of sugar; the strength of the solution needed varies in different cases. The grains of Pheasant-eye Narcissus shown were germinated in a solution of 3 per cent. cane sugar, and 1·5 per cent. gelatine, dissolved in spring water. A drop of the freshly made solution containing the grains is suspended from a cover glass in a moist chamber on the slides, and the tubes appear after a few hours, as a rule.

In order to examine the pollen of Gymnosperms longitudinal sections of staminate cones of *Pinus* or *Picea* may be taken; these show numerous grains in the large pollen sacs, each grain having two bladder-like vesicles filled with air, which serve as wings.

The germination of the grain begins before it is set free from the sac. Its stages vary in different genera; in *Pinus* two small lens-shaped cells are cut off the grain at the side farthest from the vesicles, these soon collapse and are known as the prothallial cells (in other genera, e. g., *Taxus*, only one prothallial cell is formed); three other larger cells developed from the grain remain, one of which forms the tube and another is the mother-cell of the male cells. Mature ovules of *Pinus* and *Picea* in section are seen to contain archegonia. The pollen-tubes grow down the tissue of the ovule till they reach the ovum and the nucleus of one of the non-ciliated male cells fuses with that of the ovum.

It has been discovered during the last eleven years that many of the *Cycadaceæ* give rise to *ciliated* male cells, so that one of the old distinctions between Pteridophyta and Gymnosperms—*viz.*, that the former had ciliated, the latter non-ciliated, male cells—no longer exists. A comparison can be drawn between the life-history of a Gymnosperm and that of a heterosporous Pteridophyte, e. g., *Selaginella*. In *Selaginella* two kinds of spores, macrospores and microspores, are found, and the development of the latter in the microsporangium resembles very closely that of the pollen-grains in a pollen sac, four microspores being formed from each mother-cell. A microspore on germination gives rise to a single cell representing the vegetative part of the prothallus and to an antheridium in which motile male cells (spermatozoids) develop. A macrospore gives rise to a prothallus bearing archegonia. The spermatozoids are set free when the ripe antheridium is moistened, and one of them fertilizes the ovum in an archegonium. The reduction of the vegetative part of the male prothallus in *Selaginella* is very noteworthy, and is characteristic of all the heterosporous Pteridophyta. We see that a similar reduction —not carried so far in *Pinus* and *Picea* as in *Selaginella*—takes place also in Gymnosperms, while in Angiosperms it is carried yet further, no vegetative tissue being developed, but the whole microspore (pollen-grain) being used to form the tube-cell and the male cells.

The evening botanical rambles were as under (reports are by the conductors) :—

The botanical ramble to Coulsdon, under the charge of Henry T. Mennell, took place on the evening of May 21st, and was favoured with delightful weather.

A party of twenty-seven met at Coulsdon Station, and made at once for Farthing Down, which was traversed in the direction of Chaldon.

It was rather early in the season for the plants belonging to the Downs, such as the Orchises, *Spiræa filipendula*, and others.

One or two specimens of the Fly Orchis were, however, found near the hedges on the eastern side of the Down.

Polygala calcarea was in full bloom, both the blue and white forms, and in the hedgrows the White Beam (*Pyrus aria*), with its beautiful silvery foliage, and the small Guelder Rose (*Viburnum lantana*), now in full bloom, added greatly to the beauty of the scene.

On entering the woods at the further end of the Down, a different scene presented itself. The Spring flora was in perfection, and the ground under the trees was blue with Scillas (Bluebells). The Wood Sanicle, the Sweet-scented Woodruff, the Yellow Deadnettle, and

Primroses, were abundant. *Milium effusum* was also noticed in the Wood.

The Twayblade was just putting forth its flower-spike, and several specimens were noticed with the leaves bordered with white or pale yellow.

Passing out of the wood into the lane leading to Chaldon, two or three Hawthorns of the very distinct form known as *Cratægus oxyacanthoides*, with much more glossy and entire leaves than the type, were noticed.

Farthing Down was soon regained, and the view in the bright clear evening air was most striking. On either side the Down falls away rapidly into richly wooded valleys, and in front the prospect is most extensive and attractive. *Cerastium arvense*, *Phyteuma orbiculare*, *Lamium maculatum*, were also noted on the Down. Of mosses Dr. Parsons noted *Eurhynchium piliferum* and *Mnium undulatum* in the woods.

On June 18th, 1908, a botanical ramble to Furze Hill. Conductor, Mr. J. E. Clark, B.Sc.

An evening of exceptional character favoured the party of sixteen who enjoyed the kind permission given by W. Webb, Esq., to explore this old woodland, before it passes into other hands for residential purposes. It occupies the high ground between Woodcote and Purley, and consists of dense thickets and dwarf timber, more closely crowded and rather larger than most of that on Croham Hurst. Rides traversing this in various directions were carpeted with luxuriant grass and meadow plants, the Cowslip being specially abundant. Some of these rides were flanked by Woodbine and Roses, the latter in their full beauty. On the more open spots and borders many flowers of the usual flora of the Downs were noted. The only Orchid noticed, however, was *Orchis mascula*. *Polygala calcarea*, so abundant close by on Riddlesdown and elsewhere, was almost entirely replaced by *P. vulgaris*.

Owing to the heavy rain on the day arranged for the July excursion it unfortunately had to be abandoned.

The excursion on Saturday, Sept. 12th, was made under the leadership of Dr. Parsons to Oxshott Heath and the Black Pond. The party walked from Oxshott Station across the heath and through the woods to the Black Pond, returning over a different route to Oxshott for tea. Oxshott Heath, with which Esher Common is continuous, is a tract of gravelly hills, on the Bagshot Beds, part being open heath and part extensive pine-woods. Between the hills are wet boggy hollows, in which run small streams, one of which has been dammed up to form a sheet of water—the Black Pond—now much filled up by the growth of reeds and other marsh vegetation. Here a number of bog- and water-loving plants were found, among them being:—*Viola palustris* (Bog Violet), *Hypericum elodes* (Marsh St. John's Wort), *Drosera rotundiflora* (Sundew), *Hydrocotyle vulgaris* (Marsh Penny-wort), *Polygonum Hydropiper*, *Salix repens* (Dwarf Willow), *Juncus acutiflorus* and *J. supinus* (Rush), *Scirpus fluitans*.

The Dodder (*Cuscuta epithymum*) and the Helleborine (*Epipactis latifolia*) were also found.

About thirty species of fungi were found, among the less common

being *Agaricus* (*Collybia*) *tuberosus*, *A.* (*Flammula*) *flavidus*, *Cortinarius collinitus* and *cinnamomeus*, and *Polyporus perennis* and *Schweinitzii*.

Oxshott Heath is a good station for *Hepaticæ*, several species of which grow freely on the moist banks of ditches in the peaty ground. *Pellia epiphylla* and *Diplophyllum albicans* were met with.

Mr. J. E. Clark. B.Sc., reports that the following forty flowers were in bloom at Asgarth, Riddlesdown Road, Purley, during Christmastide (*i. e.* from the Sunday preceding Christmas Day to that succeeding New Year's Day) :—

Pansy, *Viola*, Persian Violet, *Viola canadense*, Chrysanthemum, Double *Ranunculus repens*, Valerian, Double *Arabis*, Single White *Arabis*, Sweet Alyssum, *Aubrietia*, Tall Leopard's Bane, Filbert (female), Wallflower, Yellow Barberry, Darwin Barberry, Thyme, *Geum rivale*, Annual Candytuft, Perennial Candytuft, *Veronica rupestris*, Greater Periwinkle, *Ionopsidium acaule*, Snapdragon, *Lithospermum rosmarinifolium*, Primrose, Blue Primrose, Auricula, Polyanthus (various), Mignonette, *Erica carnea*, Double Daisy "Alice," *Agrostemma*, Strawberry, *Coreopsis*, *Arbutus*, *Laurustinus*, Christmas Rose, *Triteleia*, Snowdrop (common), *Crocus Sieberi*, Roses (fifteen varieties). Not one survived the 20 degrees of frost of the 30th.

This is five more than last year. For the whole month of December fifty-three flowers (compared with sixty-one) were noted, besides Roses, of which thirty-six varieties still had blooms "of sorts." Some were still worth gathering, even in Christmas week. Of *Polyanthus* also, and Primroses, there was quite a profusion, and numerous heads of Leopard's Bane.

Out of fifty species of wild flowers noted in December forty were included in the Christmastide list. This compares with sixty-one and forty-five last year. Again, perhaps, the relatively small number, considering the excessive warmth for the three months previous to Chrismas, was due not so much to the short sharp snaps in October and November as to many plants having fully flowered out. There is a decided absence of Spring flowers, however, although not a few are included in the garden list. Gorse blossom was even more abundant than a year ago. Eight Composites are included, against twelve in 1908 and nine in 1907. The Christmastide list is as follows :—

Ranunculus repens, *Brassica campestris*, *Capsella bursa-pastoris*, *Lychnis vespertina*, *Cerastium vulgatum*, *Stellaria media*, *Ulex europæus*, *U. nanus*, *Trifolium pratense*, *Rubus fruticosus*, sp., *Athusa cynapium*, *Heracleum sphondylium*, *Daucus carota*, *Hedera helix*, *Bellis perennis*, *Matricaria inodora*, *Achillea millefolium*, *Senecio vulgaris*, *S. Jacobæa*, *Carduus arvensis*, *Tragopogon pratense*, *Hypochæris radicata*, *Taraxacum Dens-Leonis*, *Scabiosa arvensis*, *Calluna vulgaris*, *Erica cinerea*, *Campanula rotundifolia*, *Veronica agrestis*, *V. Buxbaumii*, *Lamium purpureum*, *L. album*, *Euphorbia helioscopia*, *E. peplus*, *E. exigua*, *Corylus avellana* (male), *Hordeum murinum*, *Avena fatua*, *Lolium perenne*, *Poa nemoralis*, *P. annua*.

I am indebted to Mr. Mennell and to Dr. Hinde's family for some of the above records.

The actual number of the Asgarth garden list surviving into January, 1909, was thirty-three, compared with twenty-six in 1907 and in 1908.

In a list of twenty-one noted by Mr. H. T. Mennell on Christmas Day in his garden are included the following additional plants :—

Stocks, Yucca (withered flowers), American Cowslip (*Megasea crassifolia*), Lesser Periwinkle, Double White Clematis, *Alyssum saxatile*, and Holy Thorn. The latter was out on Nov. 24th, earlier than in any previous year, which coincides with its earliness and profusion of bloom near Glastonbury.

Dr. H. F. Parsons noted sixteen in his garden on Christmas Day, adding further, *Petasites fragrans*, *Calendula officinalis*, *Helleborus altifolius*, *H. lutescens*, *Viburnum tinus*, *Galanthus cilicicus*, *Crocus hyemalis*, *Cyclamen ibericum* (nearly), *Erodium manescavi*, *Potentilla alba* and *verna*, and a dwarf *Iberis*.

It is worth noting that the weather in Western England was even more abnormal, so that Sweet Peas were gathered in the north-west in December; and in Christmas week, near Glastonbury, beautiful sprays of Banksian Rose. At Bridport, Dorset, a medlar was in bloom.

Plants Observed in Flower on a Walk from Oxted to Westerham, Dec. 26th, 1909. — *Ulex europæus* (Whin), *U. nanus* (Lesser Whin), *Senecio jacobæa* (Ragwort), *S. vulgaris* (Groundsel), *Rubus* (Bramble), *Lamium album* (White Nettle), *Hedera helix* (Ivy), *Poa nemoralis*, *Erica cinerea* (Heather), *Bellis perennis* (Daisy), *Pyrethrum inodorum*, *Ranunculus repens* (Buttercup), *Thlaspi Bursa-pastoris* (Shepherd's Purse).

Two points are worth noting: (1) that the Whin was everywhere in full blossom; (2) the extraordinary scarcity of berries on the Holly. The above walk was through woods and lanes, both of hollies, and only one or two very meagre sprays of berries were seen.

Among noteworthy plants and new localities observed during the year Dr. H. F. Parsons reports—

Chrysanthemum segetum—Merstham.
Asplenium adiantum-nigrum.—Sanderstead.
A. Trichomanes.—Selsdon.
Lastrea Filix-mas.—West Wickham.
Glyceria rigida.—West Wickham.
Hypericum montanum.—Farleigh.

Mr. J. E. Clark reports *Phyteuma orbiculare* on Riddlesdown.

The number of plants on record for the commons around Croydon now stands as follows :—

Hayes and West Wickham Commons	348	species.
Keston Common	283	,,
Shirley Hills	198	,,
Croham Hurst	256	,,
Mitcham Common	462	,,
Riddlesdown	188	,,
Worms Heath	92	,,
Farthing Down	115	,,

Mr. C. E. Salmon also sends the following list. The records are his own, except when otherwise stated :—

Fumaria parviflora.—Field near Tot Hill.
Cardamine amara.—By stream, Brook Farm, south of Tandridge.
Silene dubia.—Downs above Reigate. [This is a species nearly allied to *S. nutans*, and by some considered a variety of that species. —C. E. S.]
S. noctiflora.—Near Mickleham Gallops.
Cerastium arvense.—Between Titsey and Tatsfield. Tot Hill.
Lathyrus sylvestris.—Gatton Park.
Alchemilla vulgaris var. *filicaulis.*—Woking. Miss M. Saunders.
Epilobium roseum.—Leatherhead.
Hippuris vulgaris.—Pond, Titsey Park.
**Carum verticillatum.*—In two places near Woking. Miss M. Saunders and Miss R. Cardrew.
Torilis infesta.—Near Chipstead.
Valerianella olitoria var. *lasiocarpa.*—Woking.
Serratula tinctoria.—Banstead Downs.
Phyteuma orbiculare.—Banstead Downs.
Pyrola minor.—Near Maybury. Miss R. Cardrew.
Euphrasia Kerneri.—Banstead Downs and Leatherhead.
Teucrium Botrys.—Box Hill, S. A. Chambers. [A fresh station, quite distinct from the old well-known locality on Box Hill.—C. E. S.]
Polygonum bistorta.—Midstreet, Nutfield.
Epipactis media.—Between Caterham and White Hill.
Anthoxanthum Puellii.—Leatherhead.
Bromus secalinus.

Dr. Parsons has drawn up the usual report on the weather conditions of 1908 and their effects on vegetation :—

The weather conditions during 1908 have on the whole been favourable to vegetation. The rainfall has been about the average, having been at Park Hill Rise, Croydon, 24·4 in., as compared with 23·7 in., the mean of the preceding fifteen years. Wet days have, however, been fewer than usual, 155 against 167·2, the mean of the previous fifteen years; the total rainfall having been brought up to the average by heavy falls on certain days. Thus, on Jan. 7th, and again on June 4th, falls of over an inch and a quarter brought up to a respectable figure the rainfall of what would otherwise have been very dry months, with only nine and five wet days respectively. The rainfall has been fairly equably distributed during the several months of the year, but more in the summer than in the winter months, November being the only month with less than one inch, while July and August had each over three inches. There was, however, a tendency to the occurrence of alternate spells of one to three weeks' duration of hot and cold, wet and dry weather, and those people were fortunate who were able to take advantage of the fine periods. As regards temperature, the most noteworthy features of the year were the cold backward

* This is a most interesting record, the previous habitats of the plant being all on the West Coast, from Argyllshire to Cornwall. Mr. Salmon has verified both the plant and the locality.

spring and the fine mild autumn. There was no prolonged frost, but snow was frequent in the spring; heavy falls occurred on Jan. 4th, April 23rd and 26th, and Dec. 29th. The heavy hail which accompanied the thunderstorm of June 4th did much damage to vegetation in some places.

The first four months of the year were cold, especially March and April, which were very cold and stormy. Vegetation was very backward; the spring flowers being two or three weeks late in appearing, and the pear and plum trees were scarcely in flower at the end of the month. This was fortunate, as they thus escaped the frosts. With the beginning of May fine and warm weather came, and vegetation made rapid progress, the trees being well in leaf by the end of the month. Roses and other plants were unusually free from blight. There was a heavy crop of hay, and a spell of fine weather—absolutely rainless from June 17th to July 3rd—allowed it in the neighbourhood of Croydon to be well made. This fine period was, however, followed by a fortnight of heavy rain in the middle of July, so that in colder and more backward regions the hay was injured. The corn crop was also a good one, but where not got in in the early part of August was much damaged by the heavy rain in the latter part of the month. The hop crop was a fairly good one, and fruit was plentiful. Potato disease appeared in August. Blackberries were plentiful, but very late in ripening. Fungi were only moderately plentiful. September was mostly cold, but there were some hot days at the end and the autumn afterwards was fine and warm. The first frost was on Nov. 9th; there were seven degrees of frost, and the tender summer-blooming plants were killed. November and December were for the most part fine and mild, but at the end of December there was snow and severe frost. Very low temperatures were registered on Dec. 29th and 30th—in some places under 10° F.—but the layer of snow, several inches thick, with which the ground was then covered no doubt acted as a protection to vegetation.

Geological Committee.

The Geological Committee report that regular meetings have been held on the second Tuesday of every month during the season, which have been well attended. The exhibits at the meetings were both numerous and interesting. A Chalk fish, *Leptotrachelus elongatus*, has been recorded from the Marsupites Zone, Russell Hill, Purley, which does not appear to have been previously recorded from the Chalk of Surrey, or from the same zone. Three excursions have been made. The first on June 13th to Limpsfield Chart, to the Ragstone and Hassock Quarries of the Lower Greensand, when specimens of chalcedony were found. The second, on October 10th, under the guidance of Dr. H. Franklin Parsons and Mr. H. Storr Best, was to view an exposure of Oldhaven pebble beds under London Clay by Ravensbourne Station, Beckenham. The junction of the two beds was well exposed, but the characteristic fossils of the basement bed of the London Clay were not found. The pebble beds contained large masses of calcareous conglomerate in which were embedded specimens of some of the commoner Oldhaven fossils, as *Ostrea Bellovacina*, *Cerithium funatum*, *Melania inquinata*, and *Cyrena cuneiformis*. The third

was to Worms Heath, to see a new exposure of Chalk in the large pit by the High Road, under Mr. W. Whitaker, B.A., F.R.S. Some members of this Section also joined an excursion of the Geologists' Association to Keston, on June 27th.

Microscopical Committee.

This Section may be considered to be in a thoroughly active condition. The meetings have been well attended; in fact, on some occasions it was difficult to find sufficient accommodation in the Society's room. For this satisfactory state of affairs our thanks are mainly due to the untiring energies of our late Secretary, Miss C. Ward.

The following is a list of the meetings held:—

January 25th. Crystals, Dr. Dukes. February, 22nd, Foraminifera, Mr. C. C. Fagg. March 12th, Pollen Grains, Miss K. Jeffries Davis (joint meeting with Botanical Section). April 14th, Sponges, Dr. Hinde (joint meeting with Geological Section). October 24th, Insect Parasites, Dr. Dukes. November 21st, Odontophores, Miss Prankeard.

Museum Committee.

The Museum Committee met once during the year.

The Loan Museum case in the Free Library was repaired, and the drawers made more convenient for public access. Very few specimens have been lent for exhibition during the year, and members are earnestly asked to lend local specimens for exhibition from time to time. Entomological specimens are particularly desired.

With the permission of the Council the greater part of the Carpenter Collection which could no longer be housed in the Old School of Art Room has been given away. The larger shells were divided amongst the art schools at the Croydon Polytechnics, the Croydon School of Art, and the Whitgift Grammar School, whilst the remainder of the collections, with the exception of a few specimens of marble and silica, were given to the Croydon Education Committee for their school museums and the Croydon High School for Girls.

This distribution appears to have been much appreciated by the various recipients.

Zoological Committee.

The above Section, which was resuscitated in the autumn of 1906, has unfortunately not received the support that at one time seemed forthcoming, and although one or two interesting papers have been read during the past year (Mr. J. T. Parker on "Sea Urchins," and Mr. T. F. Clarke on "Scorpions"), the attendance at the more recent meetings has been far from satisfactory. It is hoped that members will turn up in better numbers during the coming year.—S. E. Hall, *Hon. Sec.*

Donations to the Library, 1908.

From Individuals.—Nature Notes (Mr. Whitaker); The Emu (Miss Berney); The Flora of Shetland, The Scape of Taraxacum (W. H. Beeby); Carex Notes, *Plantago lanceolata*, Notes on *Limonium*, New Plants in Surrey, The Proceedings of the Holmesdale Natural History Club, 1899 to 1901 (C. E. Salmon).

From Societies. — The Missouri Botanical Garden, 18th Annual Report; Transactions of the Zoological and Malacological Society of Belgium; Journal of the Manchester Geographical Society: Journal of the Royal Microscopical Society; The Photographic Journal; Report of the British Association Leicester Meeting, 1907, and Report of the Corresponding Societies Committee; Proceedings of the Academy of Natural Sciences of Philadelphia; Report and Transactions of The East Kent Scientific and Natural History Society; Journal of The Northants Natural History Society and Field Club; Journal of the Quekett Microscopical Club; Proceedings of the South London Entomological and Natural History Society; Report of The Yorkshire Philosophical Society; Bulletin of the Lloyd Library, Cincinnati; The Rochester Naturalist; Report of the Kent and Surrey Committee of The Commons and Footpaths Preservation Society; Bird Notes and News; Transactions of the Hertfordshire Natural History Society and Field Club; Transactions of the Manchester Microscopical Society; Bulletin of the Geological Institution of the University of Upsala; Sixth Annual Report of The Horniman Museum.

During the year ninety-nine volumes belonging to the Society have been handed over to the Librarian of the Public Library, to be kept with the other books belonging to the Society.—Alfred Roods, *Hon. Librarian.*

Croydon Natural History and Scientific Society.—Receipts and Expenditure for the Year ending 31st December, 1908.

1908. Receipts.	£	s.	d.	£	s.	d.
January 1st.						
To Subscriptions for 1907 received 1908 ..	1	15	0			
,, ,, 1908 ,, 1908 ..	73	0	0			
				74	15	0
Donations and Subscriptions received on account of Meteorological Section—						
Baldwin Latham, Esq.	5	5	0			
F. Campbell-Bayard, Esq.	5	5	0			
J. Edmund Clark, Esq.	0	10	0			
Dr. J. E. Crocker (for 1907)	0	5	0			
Dr. G. Bower (for 1907)	0	10	0			
Lt.-Col. C. N. Kidd	0	10	0			
F. D. Outram, Esq.	0	6	9			
Dr. H. Franklin Parsons	0	10	0			
W. W. Wagstaffe, Esq.	0	2	6			
W. Whitaker, Esq.	0	10	0			
Croydon Corporation	0	10	0			
Croydon Rural District Council ..	0	10	0			
Metropolitan Water Board	0	10	0			
Borough of Richmond	0	10	0			
Borough of Wimbledon	0	10	0			
East Surrey Waterworks	1	1	0			
Sutton District Waterworks Co. ..	0	10	0			
				17	15	3
Donation from W. F. Stanley, Esq. ..				0	10	0
Sales of 'Transactions'				0	2	0
Dividends on Life Membership Investment (£10 19*s.* 6*d.* Consols) ..				0	5	4
				£93	7	7

1908. Payments.	£	s.	d.	£	s.	d.
January 1st.						
By Balance due to Treasurer				1	14	1
Rent of Club Room				10	0	0
Hire of Rooms for Meetings				4	10	0
Printing Rainfall Returns (September, 1907, to August, 1908)				32	17	6
Photographic Section—						
Rent of Dark Room	6	0	0			
Subscription to Royal Photographic Society	1	1	0			
Sundries	0	5	5			
				7	6	5
Anthropological Section, Postages, &c.	0	1	6			
Botanical ,, ,, ..	0	2	6			
Geological and Museum ,, ..	0	8	2			
Zoological ,, ,, ..	0	2	8			
				0	14	10
Subscriptions to—						
S.E. Union of Scientific Societies ..	0	10	0			
Commons and Footpaths Preservation Society	0	5	0			
Society for the Protection of Birds	0	5	0			
Photographic Survey of Surrey ..	0	5	0			
				1	5	0
Printing Monthly Circulars and Postage on same				8	16	3
Secretary and Treasurer's Stationery and Postage Account				3	5	3
Fire Insurance				1	2	6
Gratuity				0	5	0
Assistant Secretary				5	0	0
Expenses of two Social Evenings ..				1	17	4
Balance				14	13	5
				£93	7	7

SPECIAL FUND ACCOUNT.

£186 9s. 0d. CONSOLS.

1908. Receipts.	£	s.	d.
January 1st.			
To Balance	12	10	8
Dividends	4	13	0
	£17	3	8

1908. Payments.	£	s.	d.
January 1st.			
By Repairs to Museum Case	4	6	6
Making up Case in Club Room	0	18	6
Curator's Expenses	0	5	5
Fire Insurance *re* Museum Case	0	2	6
Balance	11	10	9
	£17	3	8

BALANCE SHEET.

1909.	£	s.	d.
January 1st.			
To Balance of General Account	14	13	5
,, Special ,, ...	11	10	9
Subscriptions for 1909 in advance	1	10	0
Amount due to the Treasurer	0	1	8
	£27	15	10

1909.	£	s.	d.
January 1st.			
By Balance at Bank	27	15	10
	£27	15	10

We, the undersigned, having examined the books of the above Society, also the Accounts and Vouchers relating thereto, certify the above are properly drawn up so as to exhibit a true and correct view of the Society's affairs.

F. J. TOWNEND, *Hon. Treasurer.*

W. L. MOORE,
W. W. TOPLEY, } *Hon. Auditors.*

N.B.—There is still due to the Society for unpaid Subscriptions £3, but there is a liability for Cost of 'Transactions' for 1907–8 of about £18.

LIST OF MEMBERS.

Corrected to 1st July, 1909.

Elected.

1897. Aldrich, Miss F. K., 14 Tavistock-road, Croydon.
1899. Alexander, E., St. Govans, Beechwood-road, Sanderstead.
1884. Allen, A. H., Wandle Court, Beddington.

1879. Backwell, R. J., 16 Penge-road, South Norwood.
1874. Baldock, J. H., F.C.S., "Overdale," 3 St. Leonard's-road, Croydon.
1898. Bannerman, W. Bruce, F.S.A., "The Lindens," Sydenham-road, Croydon.
1885. Barber, J. H., 8 Thornhill-road.
1871. Beeby, W. H., F.R.M.S., "Hildasay," Portsmouth-road, Thames Ditton.
1908. Benger, Alfred, 6 Park Hill Rise, Croydon.
1906. Bennett, John, L.D.S. Eng., 1 St. Peter's-road, Croydon.
1906. Bigby, Miss G., "Frognal" Bridgfield-road, Sutton.
Origl. Blake, W. J., "Elmfield," Park-lane, Croydon.
1902. Brant, R. W., "Lodore," Campden-road, Croydon.
1909. Bright, C. S., L.D.S. L'don., 7 Blenheim Crescent, Croydon.

1886. Campbell-Bayard, F., LL.M., F.R.Met.Soc., "Cotswold," Wallington.
1877. Carpenter, A. B., B.A., M.R.C.S., F.R.M.S., Bedford Park, Croydon.
1898. Carr-Dyer, Mrs., "Hazelea," Kenley.
1892. Carrington, L., "Penmare," Tavistock-road, Croydon.
1888. Cash, W., "Coombe How," Stanhope-road, Croydon.
1908. Chandler, S.E., D.Sc., F.L.S., 59 Anerley Park, S.E.
1897. Chatterton, G., M.I.C.E., 6 The Sanctury, Westminster, S.W.
1891. Clark, H., 12 High-street, Croydon.
1897. Clark, J. E., B.A., B.Sc., F.G.S., "Asgarth," Riddlesdown-road, Purley.
1904. Clarke, T. F., "Lurline," Blenheim Crescent, Croydon.
1908. Cochrane, P., 13 Marlow-road, Anerley, S.E.
1882. Collyer, H. C., Seaton, Devon.
1900. Corcoran, B. T., "Fairlight," Oliver Grove, South Norwood.
1909. Corry, Mrs. M. F. (Robert), 19 Chichester-road, Croydon.
1879. Cowdell, H. S., Eden Lodge, Beckenham.
1907. Crabb, W., B.Sc., 7 Edridge-road, Croydon.
1905. Crosfield, H. T., B.A., "Walden," Coombe-road, Croydon.
1906. Crosfield, G. T., ,, ,,
1900. Culverwell, J. W., 119 Lower Addiscombe-road, Croydon.
1908. Curling, Miss E. M., "Chilton," Radcliffe-road, Croydon.

1908. Darkin, W. H., Westerham.
1905. Davies, E. Ayerst, 124 Croydon-road, Anerley, S.E.
1906. Davies, G. Macdonald, 17 Elmwood-road, Croydon.
1906. Davis, Miss K. Jeffries, B.Sc., 10 Lansdowne-road.
1909. Diplock, T. G., 249 Holmesdale-road, South Norwood.
1891. Drew, H. W., F.R.C.S., "Eastgate," Addiscombe-road.
1898. Druce, F., 65 Cadogan-square, S.W.
1893. Dukes, T. Archibald, M.B., B.Sc., 16 Wellesley-road, Croydon.
1904. Du Pont, Mme. F., "Coloma School," Convent of the Ladies of Mary, Tavistock-road.

1904. Ediltrude, Mme. (M. E. Everiit), "Coloma School," Convent of the Ladies of Mary, Tavistock-road.
1890. Edridge, Sir F. T., J.P., Bramley Croft, Bramley Hill.
1909. Elwes, Miss M. B., B.Sc., 81 Southbridge-road, and St. Andrew's Girls' School.

1906. Fagg, C. C., 34 Church-road, Upper Norwood, S.E.
1907. Fell, E. K., 9 Lyndhurst-road, Thornton Heath.
1883. Fenn, W. G., Heath Lodge, London Road, Thornton Heath.
1901. Filon, L. N. G., M.A., F.R.A.S., "Vega," Blenheim Park Road, Croydon.
1907. Flint, Miss E. M., 19 Lansdowne-road, Croydon.
1901. Freshfield, E., LL.D., The Mint, Chipstead, Surrey.

1907. Gossling, Frank, B.Sc., F.R.C.S., Annandale, 15 Birdhurst-road, Croydon.
1885. Gower, H. D., 55 Benson-road, Croydon.
1902. Grant, R. C., Hale Edge, South Nutfield, Surrey.
1885. Grundy, R. F., 8 Havelock-road, Croydon.

1904. Hall, Stanley, E., 17 Dornton-road, Croydon.
1908. Hartridge, E. N., "Conishead," Chatsworth-road, Croydon.
1899. Harvey, J. E., 21 Carew-road, Thornton Heath.
1888. Helps, J. W., F.C.S., A.M.I.C.E., "Somerleyton," Haling Park Road, Croydon.
1887. Hinde, G. J., D.Ph., F.R.S., F.G.S., Ivythorne, 24 Avondale-road, Croydon.
1909. Hinde, Eric G., Ivythorne, 24 Avondale-road, Croydon.
1906. Hitchings, Wm., 139 Pemdevon-road, Croydon.
1881. Hobson, J. M., M.D., B.Sc., Woodside Court, Croydon.
1891. Hovenden, A., "Oaklands," Haling Park-road, Croydon.

1906. Inman, Miss E., 49 Edridge-road.

1899. Jast, L. Stanley, 16 Edridge-road, and Central Library.
1908. Jeffrey, F., Stanley Technical Schools, South Norwood.
1896. Johnson, E. W., "Uplands," Park Hill Road, Croydon.

1907. Keywood, J. P., 11 Pelham-road, Beckenham.
1888. Klaassen, H. M., F.G.S., "Aberfeldy," Campden-road, Croydon.
1897. Klaassen, Miss E. F., "Aberfeldy," Campden-road, Croydon.

1877. Laing, R. A., "Shirley Hyrst," Radcliffe-road, Croydon.
Origl. Latham, Baldwin, M.I.C.E., F.G.S., &c., Park Hill House, Stanhope-road, Croydon.
1891. Lloyd, Frank, Coombe House, Coombe-road.
1892. Lloyd, Arthur, Pulborough, Sussex.
1874. Lovett, Edward, F.H.S., 41 Outram-road.

Origl. McKean, K., Lambridge Lodge, St. Saviour's-road, Bath.
1902. Major, A. F., 30 The Waldrons, Croydon.
1895. Malden, A., 1 Woburn-road, Croydon.
1898. Male, H. C., M.D., Cromer Lodge, 74 Birdhurst-road, Croydon.
1886. Marshall, R., 31 The Waldrons, Croydon.
1909. Martin, R. R., "Sorbil," Carshalton Hill, Coulsdon.
1878. Mather, C. W., 47 Dingwall-road, Croydon.
1907. Mead, Miss F., 41 St. Saviour's-road, Croydon.
1906. Mellows, Miss L. F., Lansdowne House, Lansdowne-road, Croydon.
1879. Mennell, H. Tuke, F.L.S., The Red House, Park Hill Rise, Croydon.
1895. Moore, G. W., 15 Dornton-road, Croydon.
1902. Moore, W. L., ,, ,,
1896. Moore, H. Keatley, J.P., M.A., Bac. Mus., "Chipstead," Chepstow-road, Croydon.
1898. Morris, W., 25 Brakespear-road, Brockley, S.E.
1902. Morris, W. H., 1 Walpole-road, Croydon.

1892. Page, T. K. F., Thanet Cottage, Croydon-road, Beddington.
1903. Parker, J. J., 12 Outram-road, Croydon.
1905. Parker, Miss M. J., ,, ,,
1908. Parker, J. A., ,, ,,
1881. Parsons, H. Franklin, M.D., F.G.S., Oakhyrst, 4 Park Hill Rise,
1897. Parsons, Mrs. H. Franklin, ,, ,, Croydon.
1900. Parsons, Miss E. G., ,, ,, ,,
1900. Parsons, Miss F. M., ,, ,, ,,
1893. Pascall, J., "Ambleside," 68 Addiscombe-road, Croydon.
1891. Pelton, J. O., 26 Friends'-road, Croydon.
1909. Phillips, Mrs. R. A., 100 St. James'-road.
1907. Pierce, R. C., "Cree Fleet," Cumberland Gate, Kew.
1904. Pinkerton, A. L., M.D., "Travano," South Norwood Hill, S.E.
1907. Poynting, E. A., 23 St. Augustine's Avenue, Croydon.

1909. Raffety, C. W., "Wynnstay," Woodcote Valley Road, Purley.
1885. Reed, Lester, F.C.S., F.I.C., 19 South Park Hill, Croydon.
1894. Robarts, N. F., F.G.S., 23 Oliver-grove, South Norwood, S.E.
1907. Rogers, Henry, "Egremont," Warlingham.
1888. Roods, Alfred, 67 Thornhill-road, Croydon.

1908. Spencer, W. K., B.A., F.G.S., 19 Avondale-road, Croydon.
1907. Stanton, J.C.M., "Elmsleigh," Sutton, Surrey.
Origl. Stanley, W. F., J.P., F.G.S., &c., "Cumberlow," South Norwood.
1878. Straker, E., 5 Park-lane Mansions, Croydon.
1874. Swaine, J. C., "Quarry Hill," Stanhope-road, Croydon.
1882. Syms, J. E., Stanton Villa, Stanton-road, Croydon.

1897. Tarver, A., 7 Stuart-road, Thornton Heath.
1898. Tate, A., "Downside," Leatherhead, Surrey.
1907. Thompson, A., 43 Carmichael-road, South Norwood.
1880. Thompson, F., "Eversley," Haling Park-road, Croydon.
1890. Topley, W. W., 46 Friends'-road, Croydon.
1896. Townend, F. J., 29 Woodstock-road, Croydon.
1902. Townend, F. H., "Harefield," Dornton-road, Croydon.
1902. Townend, C. H., ,, ,,

1904. Vincent, T. Lewis, I.S.O., 18 Kidderminster-road, Croydon.

1881. Waterall, N., Waddon Lodge, Waddon.
1908. Webb, Miss E. A. M., B.Sc., 21 The Waldrons, Croydon, and Old Palace School.
1898. Webster, R. T., "Claremont," Radcliffe-road, Croydon.
1896. Whitaker, W., F.R.S., F.G.S., "Freda," 3 Campden-road, Croydon.
1900. Whitley, Miss K., 11 Chichester-road, Croydon.
1887. Wild, A. S., 28 Canning-road, Croydon.
1889. Wise, H. R., "Whinclose," Foxley Lane, Purley.
1906. Worters, C. F., 16 Dornton-road, Croydon.
1887. Wratten, F. C. L., "Hellingley," Dingwall-avenue, Croydon.

TRANSACTIONS

OF

THE CROYDON NATURAL HISTORY AND SCIENTIFIC SOCIETY.

1908—1909.

28.—Eolithic Implements in Surrey.

By N. F. Robarts.

(Read November 17th, 1908.)

It is nearly twenty years since Prof. Prestwich called attention to the work which Mr. Benj. Harrison had been doing for the previous ten years in systematically exploring the neighbourhood of Ightham for flint implements. In the paper read by Prof. Prestwich to the Geological Society at that time, he pointed out that upon the watersheds of the rivers in the Ightham district there were found certain rude flint implements, "generally rolled and worn . . . the bulk of which were, with a few exceptions, singularly rude, of a deep ochreous or brown colour . . . like in colour, and some almost in wear, to the brown-stained flint débris by which they were accompanied."

He pointed out that in the river gravels of the present streams this class of implement was also found associated with palæolithic implements of the ordinary type, some rolled and others still having sharp edges, which had apparently travelled but a short distance.

He also pointed out that these rude implements, when found upon the watersheds of the rivers or on the chalk plateau, were usually associated with "a drift composed of unstained angular flints, tertiary flint pebbles, some very subangular, much worn flints, uniformly stained of a deep warm brown colour, with a

few fragments of Lower Greensand, ragstone, and Oldbury Stone, and a few rare quartzite pebbles."

During the last twenty years much discussion has taken place as to the implements thus described, their authenticity has been wholly disputed, by some they have been held to be natural forms, and if admitted by others as the work of man, they have had doubt thrown on their antiquity.

Nevertheless opinion has been growing more and more in favour of Prof. Prestwich's original belief that these implements are without doubt the work of man, showing evidences of design, and that from their position they are of greater antiquity than palæolithic implements of the St. Acheul, Hoxne, or Thames Valley type.

Our district is so barren of the latter forms, and so well represented by specimens of these ruder implements, that I think our Society may well have its attention directed to them.

During the time referred to the term "eolithic" has been given to this type of implement, in the belief that it is the earliest known form of man's handiwork, and should therefore be distinguished as much from implements of palæolithic age as the latter are from the neolithic.

Nothing of course can be argued as to the age of these implements if found upon the surface, unless that surface be upon high ground above the present valleys; but a strong *inference* may be drawn if they are found upon the surface at such elevation, and are *not* found on the surface at lower elevations, but only found in river gravels associated with palæolithic and neolithic forms. It is therefore of importance to ascertain the elevations at which these implements have been found, both upon and under the surface.

I need scarcely point out that if eolithic implements were found on the surface at all elevations, as neolithic implements are, their position would imply that they had been deposited in recent times after the valleys had attained their present contours; if, however, only found upon the surface at high elevations, they must either have been deposited *before* the present valleys were formed, or their makers, if they are of human workmanship, must have lived entirely upon the high lands, and never descended into the valleys—a most unlikely supposition.

Further, if they are found in river gravels in valleys, they must be derived from higher levels which have been worn away in the excavation of the valleys.

We have, therefore, to note where these implements are found in our own neighbourhood.

Throughout the whole of the Croydon Valley, which com-

mences above Merstham, there are gravels at the bottom of the valley; whilst, commencing at Fairfield, East Croydon, and continued to Bensham Lane and beyond, is a high level gravel, quite distinct from the gravels of the present Waddon. This gravel, as far as I am aware, is quite barren of palæolithic implements. Eolithic implements, however, are fairly abundant.

Respecting the Smitham Bottom Valley, in which Croydon lies, Prestwich writes*:—"There are other instances where the continuity [of action] has been interrupted, and the original drainage diverted into other channels, leaving the valleys, as it were, half formed, and the old channels were left dry, but containing a drift carried in from beyond their present precincts. A good instance of this is to be seen in the narrow valley of Smitham Bottom, which, commencing at Croydon, runs up to the chalk-escarpment above Merstham, where it is cut off by the transverse valley draining into the Mole, and no longer passes into the Wealden area. At present it is a dry valley, excepting that during certain seasons there is an outbreak, for about half its length, of a bourne, which continues to run for a few months, but is in no way connected with the old drainage area. Along the upper part of this valley, and extending to its end above Merstham, is a thin bed of gravel composed of subangular flints and flint pebbles, with subangular fragments of *chert*, *ragstone*, and ironstone derived from the Lower Greensand. It is clear, therefore, that this Drift was deposited before the strata beyond the escarpment had been removed and when the valley was prolonged in a southern direction into the Wealden area, and the drainage brought down the usual complement of Lower Greensand débris from the hills beyond the chalk-escarpment. . . .

"The gravel at Croydon, which belongs to the earlier stages of the valley, is not that on the lower levels, which is of post-glacial age, but that which forms the higher banks on Duppas Hill on the west and Park Hill on the east of the town."

The above remarks of Prof. Prestwich, therefore, give valid reasons why the high-level gravels at Croydon should not contain palæolithic implements unless palæolithic man was of pre-glacial or glacial age, and conversely go to prove that if eolithic implements are found in them that eolithic man was pre-glacial.

Have we any fossil evidence as to the age of these gravels? Post-pliocene mammalian remains, mammoth, bos, &c., were

* Prof. J. Prestwich, "On a Southern Drift in the Thames Valley, &c.," 'Quart. Journ. Geol. Soc.,' vol. xlvi. pp. 171 *et seq.*

found in brick-earth at Purley, but they were not in this high-level gravel of which I am speaking. Elephas and rhinoceros remains have been found at Kenley, but this was probably in the later gravels, containing the re-sorted remains of this earlier gravel. At Thornton Heath railway station post-pliocene remains were also found, but these were in a brick-earth lying upon Oldhaven beds, and were probably deposited in a pool at the foot of Norwood Hill; they certainly were not connected with this sheet of gravel. At Mitcham mammalian remains (elephas) have been found, and in the Mitcham gravels there are eolithic implements. Mr. Johnson and, I think, others have also obtained palæolithic implements there, but, subject to correction, I believe the Mitcham gravels are later than the Fairfield-Bensham Lane ones, and therefore should be derived from the latter, and may be expected to contain not only the contents of the earlier gravels but also later fossils and later implements.

If the Fairfield-Bensham Lane gravels continue only to produce eolithic implements, and these are really older than palæolithic, all the evidence will go to strengthen Prestwich's theory of these gravels; whilst *if* his theory is correct, it proves the antiquity of the implements.

With regard to eolithic implements in this neighbourhood, to find them on the surface we must go to the chalk-escarpment or near it, and at a height of 800 ft., at Beech Farm, beyond Worms Heath, lying on Oldhaven beds we find a patch of Southern Drift, composed, as described by Prestwich, of "unstained angular flints, tertiary flint pebbles, some very subangular, much worn flints, uniformly stained of a deep warm brown colour, with a few fragments of Lower Greensand and ragstone," though I have not obtained specimens of Oldbury Stone or of the rare quartzite pebbles.

But the components are sufficient to identify this gravel with Southern Drift, and to satisfy us that it has come from the Wealden area.

I imagine most members of this Society, at all events those of the Geological Section, are familiar with the Wealden anticline, but lest any are not I will briefly describe it.

All members, at all events, know that, starting on the outcrop of the chalk at Purley, they gradually ascend the dip slope of that formation until, at Merstham or Titsey Hill or other points on the North Downs, they come to the chalk escarpment overlooking the Weald. They also probably know that on the South Downs the scenery is reversed, and that leaving Brighton, Worthing, or other points on the southern flank of the South Downs, and advancing north they come to the Devil's Dyke

and other parts of the escarpment looking northwards over the Weald.

We have thus two similar escarpments, those of the North and South Downs, facing each other, with the Wealden valley between, in the centre of which rise the Hastings beds, and between the latter and the chalk escarpments we have the escarpments of the Lower Greensand.

The North Downs now rise to a height of 750–860 ft., and the height of the escarpment is about 400 ft. above the Holmesdale Valley, which runs east and west parallel with the escarpment.

The Weald originally was arched over by the chalk and the beds underlying it, which it is calculated rose to a height of 2000–3000 ft. above sea-level, being the continuation of the North and South Downs.

The upheaval of the Weald is believed to have taken place in pliocene times, and at the time of upheaval the chalk was no doubt covered more or less by tertiary strata. Remains of these beds (Oldhaven and Woolwich) are found still existing—patches of same being present at Worms Heath, as well as upon the brow of the escarpment above Oxted chalk-pits, and elsewhere.

When therefore we find Southern Drift upon the higher portions of the Downs containing tertiary pebbles and fragments of Lower Greensand, we may safely conclude that these were derived from the Wealden range, and that the drift was deposited before the east and west valley was formed which cut off the drainage from the central highlands of the Weald.

The Southern Drift, therefore, was deposited sufficiently long ago to allow of the Holmesdale Valley being denuded to the depth of some 300 ft. by the Darent and the Mole, whose north and south valleys cutting through the chalk formation are merely the continuation of lines of drainage formed before the east and west Holmesdale Valley began to be eroded.

In the same way, the Merstham-Smitham Bottom Valley is an old drainage line from the Wealden highlands, whose upper portion has been cut off above Merstham, since which time there has been no stream to alter its formation, and denudation has been confined to the effects of surface drainage from the sides of the valley—until the lower part of it is reached—where it has felt the effects of the flow of the Bourne, which at one time may have risen much higher up the valley than it does at present.

It is also probable that during the Glacial Age the erosion of the valley was considerable by melting snow and destruction of the chalk by frost.

This brings us to the consideration of the age of the stone

implements associated with the Southern Drift. If implements are found in it, they go to show that man existed in Surrey and Kent upon the Wealden highlands *before* the Holmesdale Valley was eroded below the crest of the chalk escarpment—*i. e.* they must date back to pliocene times.

We must, however, satisfy ourselves that such implements are contained in the Drift, and not merely upon it, and that the Drift has not been moved and re-formed, as it probably has been at Mitcham, and may have been in the Fairfield-Bensham Lane terrace.

For the reasons given above, showing that after the erosion of the Holmesdale Valley below the crest of the chalk escarpment there were no Wealden highland streams to move the Drift, it is, I think, clear that all patches of this Drift upon the higher portions of the Downs, say above 700 ft., are *in situ*, and therefore investigation into these is what is necessary.

Such investigation has not, as far as I know, taken place in Surrey, but Mr. Benj. Harrison, as far back as May, 1894, had his attention drawn to some rude implements which were brought to him by a workman (Thos. Skinner), who informed him they came from the pit dug on the Ightham side of South Ash by Mr. Pink. This pit had been sunk to the depth of 10 or 12 ft. in the spring of 1894 in order to drain the land, and as the chalk was not met with at the above depth, the pit was filled in. This pit was described by Mr. Burnet (Mr. Pink's bailiff) as "a pit from 10 to 12 ft. deep, on the top dark soil and flints, and at the bottom gravel and pebbles, with a dark-coloured sandy loam." Mr. Harrison obtained leave to sink a pit, and in October, 1894, under the auspices of a Committee of the British Association,* consisting of Prof. Prestwich, Sir John Evans, Prof. Boyd Dawkins, and Mr. Benj. Harrison, a pit was dug alongside the one originally made by Mr. Pink. It was unfortunate that Prof. Prestwich's health prevented his taking part in superintending the operations, and that these were left entirely to Mr. Harrison, the other members of the Committee not visiting the spot whilst the work was in progress. It was, however, visited by other archæologists.

The spot chosen was near Terry's Lodge, on the chalk plateau, at about 760 ft. above O. D. The pit was 13 ft. 6 in. in length. After passing through about 12 in. humus, a compact mass of ochreous flints in a clayey matrix was met with. This extended to a depth of 2 ft., below which the pit was sunk to a total depth of 7 ft., the stratum below the flints consisting of mottled clay with large flints, but none of these were worked. The worked

* 'British Association Report,' Ipswich, 1895.

flints all came from the ochreous gravel below the surface-soil. These were found at depths of from 12 to 30 in.

A second pit was dug contiguous to the last, and worked until a depth of 26 ft. was reached. At a depth of 8 ft. a few worked stones were found in a sandy matrix, but none below this, the remaining depth of the pit being in tertiary deposits,—the chalk was not reached.

Another pit was dug, in October, 1902, at Chapel Croft Field, Parsonage Farm, Stanstead Parish, near Ash, at 510 ft. above O. D. Here the section was about 12 in. humus. Below this was strong loam containing eolithic implements at a depth of from 2 to 3 ft., and below this came eocene pebbles and eoliths.

Mr. F. J. Bennett, F.G.S.,* examined this pit and tested the composition of the gravel. He found in one hundred stones forty-one tertiary pebbles and four worked flints. In a second hundred he found twenty-seven pebbles and nine worked flints. Later he made the section as follows:—

(1) Dark sandy loam, scattered flints and pebbles, and some worked flints.

(2) Lighter coloured loams, scattered flints and pebbles, and some worked flints, getting stiffer at base.

(3) Coarse compact gravel of flints and pebbles, some whitish, some of the flints round, and some very large ones less worn, in

(4) A very stiff yellow and grey clay, mostly clean, but with a few stones and some worked.

(5) Coarse ferruginous sand stained with manganese.

(6) Yellow tertiary sand with a few pebbles.

The stratification, both of sand and pebbles, was very irregular.

This pit was not filled in when I visited it in November, 1902, and verified Mr. Bennett's section.

In none of these pits were implements found of what is recognized as palæolithic type.

So far, therefore, implements of eolithic type are proved to have been found in gravels upon the chalk plateau unassociated with palæolithic ones, and it can be proved they are to be found in later river gravels associated with palæoliths.

I should mention that those found on the chalk plateau are usually much water-worn, showing that they have been carried to their present deposit after long action by running water.

I have already mentioned that no pits have to my knowledge

* See also "Ightham," by F. J. Bennett.

been dug in the Drift in Surrey, but in the patch above Worms Heath, from which I have obtained many specimens during the past six years, new specimens are constantly turning up after ploughing, and they are evidently now distributed through the soil to the depth of the furrows. They also differ considerably in condition, as shown by the specimens exhibited. Some are comparatively sharp, and have apparently travelled but little in any stream; others are *very* water-worn, and must have come from a very considerable distance—the latter evidently have not been made near the place where they are found.

The objection that these implements are natural forms has now, I think, been thoroughly thrashed out. They bear evidences of design as much as do palæolithic and neolithic implements. The chipping is frequently in hollows, which is a strong point in favour of human workmanship—natural forces chip stones at their edges, not in their hollows. The forms are constant and recurrent, but, stronger evidence than all, large numbers of the forms can be traced through neolithic and palæolithic times. The same wants seem to have produced similar tools, just as the same wants have in neolithic ages produced the same forms amongst nations widely separated both in time and place.

Only as palæolithic implements are more rudely made than neolithic, so are eolithic more rudely made than palæolithic. But the mere fact of rude manufacture is no proof of antiquity. To-day the tribes of Central Africa are making rude iron spears whilst Europe is making highly finished machine-guns; our early iron age was 2000 to 2500 years ago, and the spears of that date hardly differ from the Central African spears of this; but there may still be a lingering disbelief in the authenticity of eolithic implements—to the casual observer, at all events, the forms and work are not readily recognizable—and on this point evidence has now come forward which must destroy the objections of the most sceptical.

In Tasmania the last remnants of the Tasmanian race died out about sixty years ago, and this backward race—apparently the most backward race in the world—was actually making eolithic implements. A Commission has recently been investigating their latest settlements, and has collected implements, which, but for material, would be indistinguishable from the eolithic implements of the Kent and Surrey plateau or those of Belgium. The same forms, the same class of workmanship. If only the race had existed for another sixty years, the eolithic controversy would possibly never have arisen. As it is, all that now has to be done is to prove the date of eolithic man in Great Britain by geological evidence.

If the plateau evidence is to be accepted, eolithic man lived upon the Wealden highlands at a time when his tools were carried down by streams on to our present chalk plateau—that is, in pliocene times. The population must have been very large, or have dwelt there for a very long time, for the tools are very numerous. Corroboration as to eolithic man's antiquity now comes from Belgium, where M. Rutot, who has written largely upon this subject, asserts he has now found undoubted eolithic implements in strata of miocene age. We have no miocene here; but if there ever were men here during the miocene period, which is quite probable, as it may have been, and probably was, dry land here when the miocene was being deposited elsewhere, we may, in looking at these ancient implements, be examining the works of miocene man which have been imbedded in the detritus of the Wealden, consisting of Lower Greensand, chalk, and tertiary strata, brought down by Wealden streams in pre-glacial times.

With regard to the implements themselves, many of the types are very persistent throughout Kent and Surrey, and are matched by similar implements in Belgium.

The proportion of hollow scrapers is very large. Some are very massive, and it is difficult to assign uses to some of the forms.

Many forms of scrapers are found for both right-handed and left-handed use, or to be used for drawing towards or pushing from the user. A right-handed form drawn towards the user could be used as a left-handed one pushed from him, and *vice versâ* with a left-handed form.

The commonly suggested use of these hollow scrapers is for preparing lance and arrow-shafts. Whether eolithic man used the bow is uncertain, probably he did; but I think Mr. Harrison's suggestion that the large scrapers were used for cleaning hands, arms, and feet has great probability, and may account for the large numbers of this tool which are found.

I would ask you to notice the difference in the method of chipping between eolithic and palæolithic implements. The former are chipped much more vertically, and the implements seldom show a bulb of concussion. The flaking of palæolithic times does not occur on them. For some reason, the flint from which they are made, in the great majority of instances, does not seem to have formed a bulb when struck. Bulbous flakes are very seldom met with; flakes therefore can only occasionally be recognized, and the proportion between eolithic flakes and tools is very different to the proportion between the flakes and tools of the later stone ages.

The principal forms which I have found in Surrey are:—

(1) A straight-backed tool, having a hollow scraper on the lower side towards one end of the tool.
(2) Spear-heads. Very rude.
(3) A pointed tool, with hollow on both sides.
(4) A lozenge-shaped tool flat on the top, with four facets terminating in a point.
(5) Possible arrow-heads.
(6) Hammer-stones.
(7) Ordinary concave scrapers.
(8) Convex scrapers. Very few specimens of the latter.

29.—Report of the Meteorological Committee, 1908.

Prepared by the Hon. Sec., Francis Campbell-Bayard, F.R.Met.Soc.

(Read February 16th, 1909.)

The arrangements under which the daily rainfall of the district round Croydon has been observed and tabulated are the same in 1908 as in previous years. This continuity of observation and tabulation is most valuable, as it enables anyone making a study of the rainfall of the district to see at a glance the variations from year to year.

With regard to 1908, the number of stations in the printed lists is one hundred and four, and there is one other station, Park View House, Leopold Road, Wimbledon, the records of which are quite complete and will be found at the end of this Report. Four stations have come to an end during the year, *viz.* Place Fell, Kenley; The Red House, Sanderstead; Bramley Hill, Croydon; Cumberland Gate, Kew; and with reference to these a few words is advisable. Mr. Brett, who has given up his house, Place Fell, Kenley, has removed to Woking, and very kindly offered to observe for the Committee from there. As Woking, though in Surrey, is a long distance outside the Croydon district, your Hon. Secretary felt bound to refuse the observations with very great regret, for it would eventually mean a very great extension of the scheme which he could not undertake without help, and would also increase the financial burden on the Society. Capt. Carpenter has let his house at Sanderstead for a considerable time, and as he could find no one to continue the observations, they naturally came to an end. Mr. Wise has left Bramley Hill, Croydon, and has gone to live at Whinclase, Foxley Lane, in the parish of Beddington, whence he will send observations, which will be the more welcome, as the rainfall about there seems to be unknown. Mr. Pierce, of Kew, is removing to Oxford, and has offered to send rainfall observations from there, which of necessity have had to be refused. To fill up the gaps in the printed sheet, your Committee have four new stations, *viz.* the Gas Works, Reigate; Ashtead; a station near Tooting Junction; and the station at Wimbledon, above-mentioned. In order to make room for one of these stations, it will be necessary to delete a station, and the one proposed is that on the roof of the Town Hall, Camberwell. This station is an electrical self-recording gauge of Messrs. Negretti & Zambra's pattern, and has never

been very satisfactory. Your Committee trust that Mr. Oxtoby, the Camberwell Surveyor, will not be very angry at this omission, but will continue to send the records as before. With reference to the self-recording gauges at Camberwell, they are not very satisfactory, and they obviously collect too small an amount. This appears in the case of Camberwell Green, where there is both a self-recording gauge of Negretti & Zambra's pattern, and an ordinary 5 in. gauge by the side of it as a check upon the observations. The records of the check gauge are the ones printed. In order to show the difference Table I. has been constructed:—

TABLE I.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
Check Gauge..	1·25	1·13	1 95	1·98	1 79	1·62	3 01	2·18	1·34	1·70	0·54	1·83	20·32
Self-recording Gauge.....	1·00	0·90	1·68	1·66	1·60	1·59	2·76	2 00	1·25	1 65	0·54	1·70	18·33
Difference	+0·25	+0·23	+0·27	+0·32	+0·19	+0·03	+0·25	+0·18	+0·09	+0·05	0·00	+0·13	+1·99

It will be noticed that in every case, with the single exception of November, when the two gauges gave equal amounts, the records of the check gauge are higher than those of the self-recording gauge, and that this difference is not a constant factor, but varied from 0·32 in. in April to 0·00 in. in November. The records of both gauges are taken weekly, and with reference to the check gauge the amounts are proportionately divided according to the daily values of the self-recording gauge. It would seem, therefore, to show that the records of a self-recording gauge, however useful they may be in other ways, are not to be implicitly relied on so far as regards depth, unless perhaps the self-recording gauge is personally looked after by a competent person. The self-recording rain-gauge, like all other self-recording instruments, wants constant attention.

Appendix I. to this Report contains a list of the observers, with particulars relating to the stations and gauges, and also the monthly tables of daily rainfall, of which a sufficient number have from month to month been pulled for the use of the Society. These printed tables contain the records of all observers, with the one exception already mentioned, reporting to the Committee.

Appendix II. contains a record of all falls of rain of 1 in. and upwards, extracted from the Monthly Tables in Appendix I.

In order to show the striking features of the rainfall of 1908, Table II. has been constructed in the same way as the similar

table in previous Reports. It consists of the records of thirty-nine stations from amongst the forty-eight, whose averages for the ten years 1891–1900 are given in the Meteorological Sub-Committee's Report for 1900, the stations for which the records are not the same being marked with a *.

When we look at the table, we notice at once that the six months of January, February, September, October, November, and December are dry, and that the remaining six months are wet. If, however, we look at the table more closely we shall notice that in January, with the exception of the three stations of Keston, which had an excess of 0·16 in., Kingston (Sewage Works) 0·10 in., and Surbiton 0·03 in., the deficiency varied from a maximum of 0·79 in. at D'Abernon Chase to a minimum 0·01 in. at Battersea Waterworks; that in February, with the two exceptions of Deptford, which had an excess of 0·06 in., and Forest Hill (Waterworks) one of 0·05 in., the deficiency was greater than in January, and varied from a maximum of 1·16 in. at Banstead (The Hall) to a minimum of 0·07 in. at Battersea (Waterworks); that in March there was a large excess of rain at every station, and the amount varied from a maximum of 1·68 in. at Abinger (The Hall) to a minimum of 0·64 in. at Wilmington; that in April the excess of rainfall was even greater than in March, and occurred at every station, and varied from a maximum of 2·18 in. at Abinger (The Hall) to a minimum of 0·63 in. at Beddington (The Croydon Sewage Farm); that in May, with the single exception of Raynes Park, where there was a deficiency of 0·08 in., there was again an excessive rainfall, which varied from a maximum of 1·46 in. at Dorking (Denbies) to a minimum of 0·02 in. at New Malden; that in June, with the five exceptions of Wilmington, with a deficiency of 0·62 in., Caterham (The Asylum) one of 0·41 in., Nutfield (The Old Gauge) one of 0·25 in., Wimbledon (Sewage Works) one of 0·15 in., and Addington (The Pumping Station) one of 0·02 in., the excess of rainfall was smaller than in the previous months, and varied from 1·39 in. at Kingston (Sewage Works) to 0·01 in. at Redhill; that in July there was again a large excess of rainfall at every station, which varied from 2·02 in. at Knockholt (The Field Gauge) to the small amount of 0·15 in. at Richmond; that in August, with the exception of Richmond, which had a deficiency of 0·06 in., the stations had, most of them, a larger excess of rainfall, varying from a maximum of 2·67 in. at Abinger (The Hall) to a minimum of 0·32 in. at Esher; that in September, with the exceptions of South Norwood, which had an excess of 0·07 in., and Beckenham and Wimbledon Hill, which had the average, the stations had a considerable deficiency, varying from 1·39 in. at Caterham (The Asylum) to 0·10 in. at Raynes Park; that in October

TABLE II.

THE RAINFALL OF 1908 AS COMPARED WITH THE AVERAGE OF THE TEN YEARS 1891–1900.

STATIONS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Knockholt (F. G.)	—0·60	—0·21	+1·02	+1·08	+0·35	+0·29	+2·02	+1·36	—0·27	—1·96	—2·12	+0·10	+1·06
Dorking	—0·48	—0·97	+1·40	+1·52	+1·46	+0·27	+0·43	+2·00	—0·23	—1·21	—2·33	—0·40	+1·46
Caterham (Asylum) ...	—0·75	—0·69	+0·77	+1·53	+0·80	—0·41	+1·04	+1·93	—1·39	—1·36	—2·71	—0·47	—1·71
Banstead (The Hall) *	—0·36	—1·16	+1·09	+1·21	+0·69	+0·25	+1·36	+1·27	—0·85	—1·16	—2·51	—0·41	—0·58
Addington Hills	—0·27	—0·50	+1·09	+1·32	+0·46	+0·48	+1·18	+1·16	—0·60	—0·98	—2·10	+0·03	+1·27
Nutfield (O. G.)	—0·41	—0·45	+1·12	+1·48	+0·82	—0·25	+0·83	+1·56	—0·65	—1·26	—2·18	+0·17	+0·78
Sevenoaks *	—0·70	—0·26	+0·91	+1·36	+0·77	+0·17	+1·06	+1·82	—0·97	—1·67	—2·32	+0·27	+0·44
Keston *	+0·16	—0·46	+1·23	+1·70	+0·56	+0·25	+1·85	+2·33	—0·51	—1·18	—2·09	—0·02	+3·82
Forest Hill (W. Wks.)	—0·17	+0·05	+0·76	+0·95	+0·27	+0·55	+1·72	+1·30	—0·47	—0·80	—1·56	—0·43	+2·17
Addington (Pump St.)	—0·35	—0·48	+1·04	+1·43	+0·36	—0·02	+1·47	+1·37	—0·71	—1·52	—2·43	—0·34	—0·18
Abinger (The Hall) ...	—0·34	—0·93	+1·68	+2·18	+1·21	+0·44	+0·37	+2·67	—0·93	—1·07	—2·62	+0·58	+3·24
Redhill *	—0·06	—0·47	+1·35	+1·61	+1·01	+0·01	+0·85	+2·16	—0·45	—1·07	—2·29	+0·26	+2·91
Hayes *	—0·32	—0·47	+0·98	+1·41	+0·56	+0·20	+1·63	+1·20	—0·53	—1·28	—2·08	—0·10	+1·20
D'Abernon Chase	—0·79	—0·83	+1·12	+1·01	+0·39	+0·95	+0·41	+1·00	—0·79	—1·10	—2·06	—0·24	—0·93
Leatherhead	—0·10	—0·85	+1·56	+1·44	+0·78	+0·73	+0·35	+1·69	—0·74	—1·31	—2·21	—0·15	+1·19
Sutton (Waterworks) *	—0·52	—0·92	+1·10	+1·31	+0·51	+0·43	+0·76	+0·64	—0·73	—1·02	—2·23	—0·64	—1·31
Forest Hill (Newfield H.)	—0·32	—0·14	+0·72	+0·96	+0·22	+0·20	+1·56	+1·26	—0·33	—0·94	—1·62	—0·17	+1·40
Orpington	—0·33	—0·44	+1·04	+1·70	+0·49	+0·16	+1·97	+1·39	—0·60	—1·62	—2·13	—0·37	+1·26
West Norwood	—0·19	—0·38	+1·05	+1·08	+0·48	+0·88	+1·25	+1·10	—0·16	—1·15	—1·68	—0·15	+2·13

THE RAINFALL OF 1908 AS COMPARED WITH THE AVERAGE OF THE TEN YEARS 1891–1900 (*contd.*).

STATIONS	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Beckenham *	—0·41	—0·10	+1·26	+1·59	+0·78	+0·85	+1·91	+1·61	0·00	—0·78	—1·67	+0·66	+5·70
Nunhead	—0·20	—0·09	+0·75	+0·63	+0·45	+0·55	+1·32	+1·18	—0·32	—0·55	—1·35	—0·46	+1·91
Croydon (Pk. Hill Ho.) *	—0·16	—0·55	+1·22	+1·34	+0·54	+0·74	+1·32	+1·05	—0·50	—0·72	—2·06	—0·10	+2·12
Wimbledon Hill *	—0·07	—0·28	+1·31	+1·57	+0·14	+0·49	+0·89	+0·67	0·00	—0·87	—1·73	—0·30	+1·82
Greenwich	—0·11	—0·08	+0·72	+0·91	+0·17	+0·41	+1·62	+1·07	—0·53	—0·97	—1·48	—0·16	+1·57
Croydon (Wn. N. Rd.)	—0·18	—0·67	+1·32	+1·41	+0·62	+0·27	+1·08	+0·94	—0·63	—0·85	—2·05	—0·07	+1·19
Wallington	—0·13	—0·61	+1·27	+1·30	+0·88	+0·54	+1·06	+1·13	—0·48	—0·89	—2·14	—0·36	+1·57
Beddington (C. S. Fm.)*	—0·48	—0·64	+0·88	+0·63	+0·91	+0·51	+1·07	+0·99	—0·49	—0·89	—2·04	—0·45	0·00
South Norwood *	—0·14	—0·28	+1·31	+1·38	+0·52	+1·00	+1·24	+1·41	+0·07	—0·69	—1·54	+0·02	+4·30
Beddington (Riverside)	—0·19	—0·65	+1·06	+1·38	+0·97	+0·30	+1·07	+1·06	—0·58	—0·96	—2·16	—0·26	+1·04
Richmond *	—0·49	—0·52	+0·70	+1·14	+0·03	+0·14	+0·15	—0·06	—0·53	—1·13	—1·56	—0·29	—2·42
Wimbledon (Sew. Wks.)	—0·24	—0·55	+0·92	+0·94	+0·13	—0·15	+0·39	+0·71	—0·73	—0·58	—1·38	—0·17	—0·71
Raynes Park	—0·51	—0·66	+0·68	+1·02	—0·08	+0·15	+0·66	+0·39	—0·10	—1·05	—2·03	—0·57	—2·10
New Malden	—0·31	—0·41	+1·15	+1·20	+0·02	+1·22	+0·82	+0·87	—0·44	—1·01	—1·70	—0·48	+0·93
Esher	—0·10	—0·74	+1·05	+1·08	+0·07	+0·80	+0·95	+0·32	—0·57	—0·55	—1·65	—0·43	+0·23
Kingston (Sew. Works)	+0·10	—0·37	+1·22	+1·37	+0·15	+1·39	+0·40	+0·74	—0·53	—1·16	—1·96	—0·81	+0·54
Surbiton	+0·03	—0·34	+1·14	+1·20	+0·11	+0·80	+0·53	+0·67	—0·38	—1·03	—1·73	—0·39	+0·61
Wilmington	—0·15	—0·43	+0·64	+1·11	+0·12	—0·62	+1·35	+0·80	—0·63	—1·54	—1·71	—0·34	—1·40
Battersea (Waterworks)	—0·01	—0·07	+0·74	+0·77	+0·29	+0·29	+1·32	+0·33	—0·94	—0·45	—0·87	+0·71	+2·11
Deptford	—0·20	+0·06	+0·78	+0·96	+0·16	+0·85	+1·59	+1·18	—0·46	—0·72	—1·25	—0·03	+2·92

every station had a deficiency varying from 1·96 in. at Knockholt (The Field Gauge) to 0·45 in. at Battersea (The Waterworks); that in November the deficiency was extremely large at every station, and varied from 2·62 in. at Abinger (The Hall) to 0·87 in. at Battersea (The Waterworks); and that in December thirty stations had a deficiency varying from 0·81 in. at Kingston (The Sewage Works) to 0·02 in. at Keston, and the remaining nine an excess which varied from 0·71 in. at Battersea (The Waterworks) to 0·02 in. at South Norwood.

If we now consider the yearly rainfall, we have (1) the singular fact that the rainfall of Beddington (The Croydon Sewage Farm) is the average fall; (2) that nine stations had a deficiency which varied from a maximum of 2·10 in. at Raynes Park to a minimum of 0·18 in. at Addington (The Pumping Station); and (3) that twenty-nine stations had an excess of rainfall which varied from the very large ones of 5·70 in. at Beckenham and 4·30 in. at South Norwood to 0·23 in. at Esher. Looking, therefore, at the rainfall of our own district, the year appears to be a wet one, for we find that, according to the average, we have an excess of 41·55 in.—that is, about a year and three-quarters rainfall—an amount made up of the excess in the twenty-nine stations after deducting the deficiency of the nine stations. It will, however, be remembered, as previously mentioned, that the wet months occurred during the time of much evaporation and the dry ones during the time of least evaporation, and that consequently the outlook for the coming year 1909 is by no means a favourable one, so far as the water supply of the underground sources is concerned.

If we now look at the year in relation to the number of rainy days, we are confirmed in our opinion that the year has been rather a wet one. In Table III. is given the number of rainy days at Wallington and Greenwich, as compared with the average, and so far as the year is concerned there is at Wallington an excess of thirteen in the number of rainy days, and of 1·57 in. of rainfall, and at Greenwich an excess of eight days, with the same excess of rainfall as at Wallington. To go into particulars, we notice that in January both the rainfall and the number of days are below the average. In February the number of days is large, whilst the rainfall is small, showing that the individual falls must be small. In March, April, and May both the rainfall and the number of rainy days are above the average. In June the rainfall was above the average, whilst the rainy days were much below, showing that the falls must be large. In July the number of rainy days is slightly in excess, and the falls greatly so, so that again the individual falls must have been large; and the same remark applies to August, in which month the rainfall is in excess, and the number of rainy days

the average or slightly below. In September we have a deficiency in rainfall, and an excess in the number of days, showing that the falls are small; and the same remark applies to October, in which month there is a considerable deficiency in the fall, and in the case of Wallington a slight excess, and at Greenwich a slight deficiency in the number of rainy days. In November there is a large deficiency both in the rainfall and number of rainy days; and in December there is a deficiency in the rainfall, and an excess in the number of days, again showing that the individual falls are small.

TABLE III.

Number of Rainy Days at Wallington, Surrey.

Average of 10 years	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
1891–1900	18	14	13	11	11	11	10	15	12	16	16	17	164
1908	13	17	21	16	16	6	11	15	13	17	11	21	177

Number of Rainy Days at Greenwich Observatory, Kent.

Average of 10 years	Jan.	Feb.	Mar.	Apr.	May	Jun.	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
1891–1900	16	12	14	11	12	12	12	15	12	16	15	16	163
1908	14	16	21	15	15	5	13	14	15	15	11	17	171

The number of falls of one inch and upwards of rain are given in Appendix II., and number nine. Of these falls only those of January 7th and June 4th extend over a wide area, the other falls being confined to a district, and sometimes even to individual places. The greatest fall took place at Epsom on January 7th, and amounted to 1·90 in.

Mr. Baldwin Latham, our President, has again very kindly told me that the total number of hours during which rain fell in 1908 was 437·70, which gives the actual number of days of twenty-four hours each as 18·2, and the actual annual rate of fall as ·0613 in. per hour. This compares with 16·1 days and ·0656 in. per hour in 1907, 17·8 days and ·0604 in. per hour in 1906, 21·6 days and ·0467 in. per hour in 1905, 24·9 days and ·0377 in. per hour in 1904, and 31·5 days and ·0512 in. per hour in 1903. The smallest number of days was in 1895, *viz.* 14·9, when the rate of fall per hour was ·0590 in. These figures show that the rate of fall per hour was relatively much heavier than in any year since 1895, with the single exception of 1907.

In conclusion, the Committee tender their thanks to those individuals and public bodies, seventeen in number, who have aided the rainfall work of the Society by their pecuniary contributions, and also to the rainfall observers themselves, who, by their self-sacrificing assiduity, have made this organization a success.

Park View House, Leopold Road, Wimbledon, Surrey.

Observer—Stanley Single. Gauge 5 in. in diameter.

Height of gauge above ground, 1 ft.
Height of station above sea-level, 150 ft.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
1908	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
	1·57	1·22	2·68	2·50	1·72	1·54	3·39	3·29	1·65	2·45	1·17	1·91	25·09

APPENDIX II.

Falls of 1 Inch and Upwards.

January 7th.—Epsom 1·90 in.; Kingston (Sewage Works) 1·64 in.; West Molesey 1·63 in.; Redhill 1·62 in.; Kew (Kew Gardens Road) 1·54 in.; Kew (Cumberland Gate) 1·52 in.; Purley (Riddlesdown Road) and Chevening Park 1·46 in.; Kenley (Place Fell) 1·45 in.; Sevenoaks and Surbiton 1·44 in.; Abinger (The Hall), Merstham, and Caterham (The Asylum) 1·42 in.; Walton-on-the-Hill and Croydon (Avondale Road) 1·36 in.; Upper Gatton and Banstead (The Hall) 1·35 in.; Burgh Heath 1·34 in.; Croydon (Park Hill House) 1·32 in.; Dorking (Denbies), Warlingham, Banstead (Basing House), and Kingston (County Hall) 1·30 in.; Leatherhead and Kenley (Hazelea) 1·29 in.; Buckland, Beddington (Riverside), and Croydon (Waddon New Road) 1·28 in.; Croydon (Park Hill Rise) and Addington (Pumping Station) 1·27 in.; Chipstead, Wallington, and Esher 1·26 in.; Beddington Corner 1·25 in.; Abinger (The Rectory), Betchworth, Wimbledon (The Downs), and Battersea Park 1·23 in.; South Nutfield 1·22 in.; Croydon (Bramley Hill) and Eltham 1·20 in.; Putney Heath 1·19 in.; Nutfield (old gauge) and Dartford 1·17 in.; Addington Hills 1·16 in.; Chaldon and Carshalton 1·15 in.; Raynes Park and Richmond 1·14 in.; Wimbledon (Sewage Works) 1·13 in.; Sanderstead (Beechwood Road) and Benhilton 1·12 in.; Outwood and West Norwood 1·11 in.; Sutton (Sewage Works) and Brockwell Park 1·10 in.; Sutton (Waterworks) 1·09 in.; Croydon (Woburn Road) and Battersea (Waterworks) 1·08 in.; South Norwood, Wandsworth Common, and Upper Norwood 1·07 in.; Sanderstead (The Red House) 1·06 in.; Nutfield (new gauge) 1·05 in.; Chislehurst 1·03 in.; New Malden, Forest Hill (Dartmouth Road) and Clapham Park 1·02 in.

March 25th.—Kew (Kew Gardens Road) 1·13 in.

June 4th.—Brockwell Park 1·52 in.; Anerley 1·44 in.; South Norwood 1·41 in.; Upper Norwood 1·38 in.; West Norwood 1·29 in.; Croydon (Park Hill Rise) 1·28 in.; Sevenoaks and Southwark Park 1·26 in.; Croydon (Park Hill House) and Deptford 1·24 in.; Telegraph Hill 1·22 in.; Epsom and Croydon (Woburn Road) 1·21 in.; Beckenham and Kingston (Sewage Works) 1·20 in.; Clapham Park 1·17 in.; Knockholt (field gauge), Orpington, New Malden, and Streatham 1·13 in.; Beddington Corner 1·12 in.; Addington Hills 1·11 in.; Knockholt (Tower Gauge) 1·07 in.; Chevening Park, Beddington (Sewage Farm) and Wimbledon (The Downs) 1·05 in.; Chislehurst 1·03 in.

July 12th.—Chislehurst 1·80 in.; Orpington 1·71 in.; Dartford 1·50 in.; Sevenoaks 1·49 in.; Bromley 1·41 in.; Eltham 1·40 in.; Wilmington 1·32 in.; Chevening Park 1·27 in.; Knockholt (field gauge), Forest Hill (Honor Oak Road), and Clapham Park 1·23 in.; Forest Hill (Dartmouth Road) 1·22 in.; Knockholt (tower gauge) 1·19 in.; Croydon (Park Hill House) 1·15 in.; Keston 1·14 in.; Bromley Common 1·13 in.; Southfleet 1·12 in.; Beddington (Riverside) 1·11 in.; Battersea (Park) 1·10 in.; Beckenham and Brockwell Park 1·07 in.; Beddington (Sewage Farm) 1·06 in.; Hayes and Forest Hill (The Cemetery) 1·05 in.; Greenwich 1·04 in.; Upper Norwood and Deptford 1·03 in.; West Wickham 1·02 in.; Wallington and Croydon (Woburn Road) 1·01 in.; Croydon (Waddon New Road) 1·00 in.

July 16th.—Betsom Hill 1·13 in.; Knockholt (field gauge) 1·05 in.; Knockholt (tower gauge) 1·02 in.; Caterham (The Reservoir) 1·01 in.

August 23rd.—Betsom Hill 1·51 in.; Abinger (The Hall) 1·23 in.; Abinger (The Rectory) and Dorking (Denbies) 1·22 in.; Banstead (Basing House) 1·14 in.; Betchworth, Nutfield (old gauge), Nutfield (new gauge), and Caterham (The Reservoir) 1·13 in.; Outwood and Walton-on-the-Hill 1·12 in.; Holmbury St. Mary and Upper Gatton 1·11 in.; Merstham and Knockholt (field gauge) 1·10 in.; Burgh Heath 1·09 in.; Knockholt (tower gauge) 1·08 in.; Buckland 1·06 in.; Brockwell Park 1·05 in.; West Wickham 1·04 in.; D'Abernon Chase 1·02 in.; Leatherhead 1·01 in.; Redhill, Hedley, Chaldon, Caterham (The Asylum), and Banstead (The Hall) 1·00 in.

August 28th.—Sevenoaks 1·16 in.

October 16th.—Kenley (Hazelea) 1·43 in.

October 18th.—Holmbury St. Mary 1·24 in.; Abinger (The Hall) 1·19 in.; Dorking (Denbies) 1·08 in.; Abinger (The Rectory 1·07 in.

APPENDIX I.

CROYDON NATURAL HISTORY AND SCIENTIFIC SOCIETY

(Meteorological Committee.)

Stations.	Observers.	Size of Gauge.	Height above Ground.		Height of Stat'n. above Sea-level.
		IN.	FT.	IN.	FT.
Holmbury St. Mary (Ioldwynds)	F. Cornish	5	1	0	530
Abinger (The Rectory)	Miss Brodie-Hall	5	1	0	381
Abinger (The Hall)	The Lord Farrer	8	2	0	320
Dorking (Denbies)	J. Beesley	5	0	6	610
Betchworth (The Holmes)	F. R. Rushton	5	0	8	322
Buckland (Hartswood)	R. W. Clutton	5	1	0	174
Redhill (Linkfield Lane)	Miss M. E. Janvrin	5	1	0	325
Nutfield (The Priory, old gauge)	J. Moffatt	8	1	2	468
Nutfield (The Priory, new gauge)	J. Moffatt	8	1	2	331
South Nutfield (Hale Edge)	R. C. Grant	5	1	0	270
Outwood (The Orchards)	H. Gurney	5	1	0	288
Betsom Hill	W. Morris	5	1	0	820
Sevenoaks (St. John's Hill)	W. W. Wagstaffe	5	1	10	404
Westerham (Hill Estate)	W. Morris	5	1	0	539
Westerham (The Town)	W. Morris	5	1	0	380
Merstham (Rockshaw Lodge)	T. W. Hill	5	1	0	475
Upper Gatton (The Park)	F. Druce	5	1	0	600
Walton-on-the-Hill (Shirley)	E. P. Hawthorn	5	0	6	560
Hedley (The Hurst)	Mrs. Lyall	5	1	3	450
Leatherhead (Downside)	A. Tate	5	1	0	250
D'Abernon Chase	Sir W. Vincent, Bart.	5	1	0	280
Chipstead (Shabden Park)	J. Crerar	5	1	0	550
Chaldon (The Rectory)	Rev. G. E. Belcher	5	1	0	542
Caterham (Metropolitan Asylum)	P. E. Campbell, M.D.	5	1	0	610
Caterham (The Reservoir)	E. Surrey Water Co.	5	1	0	705
Chevening (The Park)	C. Sutton	5	1	0	360
Knockholt Beeches (Field Gauge)	W. Morris	5	1	0	785
Knockholt Beeches (Tower Gauge)	W. Morris	5	24	6	812
Chelsham (Fairchildes)	A. S. Daniell	8	1	0	600
Warlingham (Egremont)	H. Rogers	5	1	0	614
Kenley (Hazelea)	Mrs. Carr-Dyer	5	1	0	282
Kenley (Place Fell)	J. V. Brett	5	1	0	300
Banstead (The Hall)	Mrs. Maitland	8	1	0	480
Banstead (Basing House)	A. Pringle	8	1	0	456
Burgh Heath (The Reservoir)	Sutton Dis. Water Co.	8	1	0	580
Epsom (Ashley Road)	S. C. Russell	5	1	0	160
Sanderstead (The Red House)	Capt. Carpenter, R.N.	5	1	0	374
Sanderstead (Beechwood Road)	E. Alexander	5	0	10	375
Purley (Riddlesdown Road)	J. E. Clark	5	1	0	360
Purley (Pumping Station)	E. Surrey Water Co.	5	1	0	215
Sutton (Carshalton Road)	Sutton Dist. Water Co.	5	1	0	110
Sutton (Sewage Works)	C. Chambers Smith	8	1	0	94
Benhilton (Angel Hill)	J. C. M. Stanton	5	1	3	125
Carshalton (Sewage Works)	W. W. Gale	5	1	0	118
Wallington (Maldon Road)	F. Campbell-Bayard	5	4	1	140
Beddington (Riverside)	Miss Rostron	5	1	0	120
Beddington (Sewage Farm)	Croydon Corporation	5	1	0	129
Croydon (Waddon New Road)	Croydon Corporation	5	1	0	146
Croydon (Woburn Road)	A. Malden	5	1	6	183
Croydon (Park Hill Rise)	H. F. Parsons, M.D.	5	1	0	250
Croydon (Park Hill House)	Baldwin Latham	8	1	0	265

Stations.	Observers.	Size of Gauge.	Height above Ground.		Height of Statn. ab. Sea-level.
		IN.	FT.	IN.	FT.
Croydon (Bramley Hill)	H. R. Wise	5	1	0	198
Croydon (Avondale Road)	Dr. G. J. Hinde	5	1	0	225
Addington Hills (The Reservoir)	Croydon Corporation	8	0	9	473
Addington (Pumping Station)	Croydon Corporation	8	1	0	331
West Wickham (Wickham Court)	Sir H. F. Lennard, Bt.	5	1	2	300
Hayes (Hayes Place)	J. Grandfield	8	1	0	350
Keston (Forest Lodge)	W. H. Dodgson	5	1	0	300
Orpington (Waterworks)	W. Morris	5	1	0	220
Southfleet (Waterworks)	W. Morris	5	1	0	82
Chislehurst (Hawkwood)	Miss M. C. Edlmann	5	1	0	300
Bromley (The Palace)	Coles Child	5	1	0	187
Bromley Common (Elmfield)	Rev. J. P. Faunthorpe	5	0	9	240
Beckenham (Recreation Ground)	J. A. Angell	8	1	0	110
Anerley (The Town Hall)	H. W. Longdin	8	40	0	191
South Norwood (Woodvale)	E. Dean	5	1	0	216
Beddington Corner (Millgreen Rd.)	G. Miller	5	5	0	77
Wimbledon (Sewage Works)	C. H. Cooper	5	1	0	58
Wimbledon (The Downs)	Francis Fox	5	1	0	162
Raynes Park (Pumping Station)	C. H. Cooper	5	1	0	47
New Malden (Sewage Works)	T. V. H. Davison	5	1	0	45
Worcester Park (Manor Lodge)	F. D. Outram	5	1	9	120
Esher (Sewage Works)	A. J. Henderson	5	1	0	40
West Molesey (The Waterworks)	H. E. H. Wrinch	5	1	0	32
Surbiton (The Waterworks)	H. E. H. Wrinch	5	0	6	25
Kingston (Sewage Works)	T. Stevens	5	1	0	25
Kingston (County Hall)	E. Underwood	5	0	9	31
Richmond (The Terrace)	J. H. Brierley	8	1	6	109
Kew (Kew Gardens Road)	Lionel Burrell, M.D.	5	1	2	23
Kew (Cumberland Gate)	R. C. Peirce	5	1	5	22
Putney Heath (The Reservoirs)	H. E. H. Wrinch	5	1	0	180
Wandsworth Com. (Patten Road)	F. J. Brodie	5	1	0	100
Streatham (Conyers Rd. Waterw.)	J. W. Restler	5	4	1	110
West Norwood (Thornlaw Road)	W. Marriott	5	1	0	220
Up. Norwood (Dulwich-wood Park)	H. V. Caldicott	5	1	2	276
Forest Hill (Dartmouth Road)	L. W. F. Behrens	5	1	0	220
Forest Hill (Honor Oak Road)	J. W. Restler	5	1	0	344
Forest Hill (Camberwell Cemetery)	W. Oxtoby	8	2	2	160
Wilmington (The Waterworks)	W. Morris	5	1	0	25
Dartford (West Hill House)	Lieut-Col. C. N. Kidd	5	1	3	100
Eltham (High Street)	W. Morris	5	1	0	245
Nunhead (Linden Grove)	J. W. Restler	5	4	0	176
East Dulwich (Grove Vale Depot)	W. Oxtoby	8	2	2	58
Brockwell Park	Lond. County Council	8	1	0	140
Clapham Park (Atkins Road)	D. W. Horner	5	1	3	128
Battersea Park	Lond. County Council	5	9	6	12
Battersea (Waterworks)	J. W. Restler	5	3	0	21
Camberwell (The Green)	W. Oxtoby	8	2	2	17
Camberwell (Town Hall)	W. Oxtoby	8	49	0	21
Camberwell (Leyton Square)	W. Oxtoby	8	2	2	14
Telegraph Hill	Lond. County Council	5	8	6	135
Greenwich (Royal Observatory)	Astronomer Royal	8	0	5	155
Deptford (Waterworks)	W. Morris	5	1	0	20
Southwark Park	Lond. County Council	5	10	0	9

Note.—The observations are taken at 9 a.m., except at Kingston (County Hall) and Streatham (7.30 a.m.), Purley (Riddlesdown Road) (8 a.m.), Sanderstead (Beechwood Road) (8.20 a.m.), Sevenoaks, Clapham Park, Battersea Park, and Southwark Park (10 a.m.), and Banstead (Basing House) (6 p.m.).

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	·04	·06	·04	·06	·04	·01	·10	·03	·03	·04	·05	·10	·05	..	·10	·07	·06	·02	·02	·02	·01	·01	·09	·04	·05	·09
7	·96	1·23	1·42	1·30	1·23	1·28	1·62	1·17	1·05	1·22	1·11	·70	1·44	·74	·96	1·42	1·35	1·36	·73	1·29	·68	1·26	1·15	1·42	·69	1·46
8	·61	·10	·16	·14	·12	·12	·15	·14	·14	·13	·11	·50	..	·53	·46	·16	·25	·14	·17	·15	·21	·20	..	·10	·38	·33
9	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	·04	·02	..	..	·03	·02	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·06	·02	·03	·03	·01	·01	·02	·01	·01	·01	·01	·04	·03	·01	..	·02	·03	·02	·03	·02	..	·06	·02	·02	·04	·01
16	·08	·10	·05	·07	·06	·10	·09	·07	·06	·07	·08	·15	·13	·12	·16	·08	·08	·05	·04	·02	·01	·08	·09	·10	·12	·12
17	..	..	..	..	·01	..	·01	·01	·01	..	..	·02	..	·01	..	·01	..	..	..	..	..	·01	..	·01	..	..
18	..	..	·01	·02	·01	..	·02	·01	·01	..	..	..	..	..	..	..	..	·01	..	..	..	·01	..	..	..	..
19	..	..	..	..	..	..	..	·01	·01	·02	·02	..	..	..	..	..	·03	..	·03	·02	..	·01	..	·02	..	..
20	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	·01	..	·01	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	·01	·02	·01	..	·01	·01	·02	..	·01	..	·02	..	..	..	·01	..	..	..	..	·02	..	..	..	..
23	..	..	..	..	·01	..	·01	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	·01	..	..	·01	..	..	..	..	..	..	..	..	..	·02	..	..	..	·01	..	·01	..	..
25	..	·05	·04	·04	·02	·02	·02	·02	·01	·02	·01	..	·03	..	·03	..	·02	·02	·04	·03	..	..	·04	·01	..	·04
26	·24	·16	·19	·18	·14	·12	·19	·14	·14	·16	·11	·19	·10	·10	·15	·19	·14	·09	·10	·08	·09	·10	·11	·10	·25	·12
27	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
28	·13	·10	·14	·10	·09	·10	·05	·06	·05	·07	·06	·05	·03	..	·03	·03	·01	..	·05	·08	·08	·02	·03	·03	·05	..
29	..	..	..	..	..	..	·01	..	..	·01	..	..	..	..	..	..	·01	..	..	..	..	..	..	·01	..	·04
30	·03	..	·01	·03	·02	·01	·03	·04	·03	·03	..	·04	·02	·04	·03	·03	·03	·04	·04	..	·02	·01	·03	·02	·06	..
31	..	..	..	..	..	·01	·01	..	..	..	·03	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	·03
*	2·15	1·82	2·10	2·03	1 81	1·78	2·36	1·79	1·62	1·82	1·61	1·79	1·85	1·55	1·92	2·01	2·03	1·77	1·25	1·71	1·10	1·80	1·56	1·90	1·64	2·24
†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (Place Fell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N. rd.)	Croydon (Wob. rd.)	Croydon (Park H.R.)	Croydon (Pk. H. Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..		..	..	..	..	..	..	·01	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..
6	·02	·02		·04	·01	·02	·03	·06	·03	·01	..	..	·01	·03	..	·01	..	..	..	·01	..	·01	..	..	·01	..
7	·94	·87		1·30	1·29	1·45	1·35	1·30	1·34	1·90	1·06	1·12	1·46	·98	1·09	1·10	1·12	1·15	1·26	1·28	·90	1·28	1·08	1·27	1·32	1·20
8	·37	·34		·15	·12	..	..	·06	·13	·14	·20	·11	·19	·26	·15	·10	·12	·25	·18	·14	·07	·11	·09	·09	·13	·11
9	..	..		..	..	..	..	..	..	..	..	..	..	..	..	·03	..	..	..	..	..	..	..	..	..	..
10	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..		..	..	..	..	..	..	·02	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..		·02	..	..	·10	..	·02	·02	..	..	..	·04	..	·02	..	..	..	·01	..	..	..	..	·01	..
15	·02	·02		·03	..	·01	..	·05	·01	·01	..	..	·01	·02	..	·01	..	·01	..	..	..	·01	..	·01	..	·01
16	·11	·10		·10	·06	·06	..	..	·05	·06	·05	·05	·06	·08	..	·02	·01	·01	..	·01	·02	..	·01	..	·02	·01
17	..	..		..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..		·02	..	..	..	..	·03	·02	·01	·01	·01	..	·02	·02	·01	..	·02	..	..	..	..	..	·01	..
19	..	..		·02	..	·01	·09	..	·02	·02	·01	..	·01	..	..	·01	..	..	·01	..	..	..	..	..	..	·15
20	..	..		..	·02	..	..	..	..	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
21	..	..		·01	..	..	..	..	..	·01	..	·01	..	..	..	·02	..	..	·01	..	..	..	..	·01	·01	·01
22	..	..		·02	..	..	..	..	..	·01	·01	..	·01	..	..	..	·01	..	·01	..	..	..	..	..	..	·01
23	..	..		..	..	..	..	·05	·02	·01	·01	·01	..	·02	..	·03	·01	..	·01	..	..	..	·02	·01	·02	..
24	..	..		·01	..	·02	..	..	·03	·03	..	·01	·01	..	..	·01	..	·03	..	·02	..	..	..	..	..	..
25	..	..		·02	·02	..	·04	..	·03	·03	·01	·01	·01	..	..	·01	..	..	·02	..	..	·05	..	..	..	·01
26	·21	·18		·11	·08	·08	·11	·12	·10	·10	·04	·05	·06	·11	·07	·05	·03	·06	·06	·07	·05	·06	·04	·05	·06	·05
27	·01	·01		..	..	..	..	..	..	..	..	..	..	·04	..	..	..	..	..	..	..	..	..	..	..	..	..
28	·04	·03		·02	..	·02	·04	·04	·01	·05	·05	·04	·06	·07	..	·03	·03	·04	·04	·04	·02	·04	·01	·04	·03	·03
29	..	..		·02	·03	..	..	..	..	·01	·01	..	·01	..	·05	·01	..	·01	·01	..	..	..	..	·01	·01	·01
30	·03	·02		·03	·02	..	·03	·03	·03	·04	·02	·01	·02	..	·02	·03	·02	·03	·03	·02	·02	·02	·02	·02	·03	·02
31	..	..		·02	..	·01	..	..	..	..	·02	..	·01	..	..	..	·01	..	·01	·01	..	..	..	..	..	..
*	1·75	1·59	1·59	1·94	1·65	1·68	1·79	1·71	1·85	2·50	1·52	1·43	1·94	1·66	1·40	1·54	1·37	1·59	1·67	1·61	1·08	1·58	1·27	1·51	1·66	1·62
†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

MONTHLY GAUGE.

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump. St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew. Wks.)	Wimbledon (The Downs	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew. Wks.)	Kingston (County H.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
6	·02	·01	..	..	..	..	·01	·01	..	..	..	..	·01	·03	..	..	·01	..	..	..	·01	..	..	..	..	..
7	1·36	1·16	1·27	·89	·64	·75	·99	·80	1·03	·87	·68	·84	·85	1·07	1·25	1·13	1·23	1·14	1·02	·99	1·26	1·63	1·44	1·64	1·30	1·14
8	·10	·13	·18	·64	·76	·89	·25	·07	·27	·59	·25	·12	·34	·11	·11	·12	·11	·10	·07	·42	·11	·12	·06	·08	·38	·05
9	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	·01	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·01	·01	·01	..	..	·03	..	..	..	·01	·02	..	..	·01	..	..	·01	..	..	·03	..	..	..	..	..	·01
16	·03	·03	·05	·04	..	·07	·03	·02	·03	·04	..	·03	·02	·03	·03	·01	·02	·03	·01	·02	·02	·01	·02	..	·03	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	·02	·01	·01	..	..	..	..	·01	..	..	..	·02	·01	..	..	..	·02	..	..	..	·01	·01	·01	·02	..	..
19	..	·01	·01	..	..	..	..	·01	·01	..	..	..	..	·01	..	..	..	·01	..	..	..	..	·01	..	·02	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	·01	..	..
22	..	·02	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	·01	..	·01	..	..
23	·02	..	..	..	..	..	..	·01	·01	..	..	·02	..	·02	..	·01	..	..	..	..	..	..	..	..	..	..
24	·01	·01	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	·03	..	..	..	..	·01	·01	..	..	..
25	·01	·02	..	..	..	·03	·02	..	..	..	..	..	·01	·01	..	..	..	..	..	·02	·02	..	..	..	·02	..
26	·07	·06	·06	·09	·11	·07	·07	·07	·08	·11	·08	·10	·10	·08	·09	·08	·11	·10	·03	·07	·05	·09	·09	·11	·10	·05
27	..	·01	..	..	..	..	..	..	..	..	..	·01	..	·01	..	..	·02	..	..	..	..	..	..	..	..	..
28	·07	·04	·06	..	·05	·06	·06	·05	·06	·05	·03	·08	·01	·03	..	..	·02	·01	..	..	..	·02	·01	·01	..	·01
29	·02	·01	..	..	·04	·03	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
30	·03	·03	·03	·04	..	..	..	·01	·03	·04	..	·05	·03	·04	·04	·01	·03	·02	..	·02	·01	·01	·01	·02	·03	·02
31	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..
*	1·81	1·56	1·68	1·70	1·60	1·93	1·43	1·09	1·52	1·72	1·06	1·28	1·38	1·46	1·53	1·36	1·62	1·41	1·13	1·59	1·49	1·92	1·66	1·91	1·88	1·28
†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for January is 1·81 in., and from 1st January 1·81 in.* **January, 1908.**

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandswth. Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilming-ton	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
6	·01	·01	·02	·01	..	..	·02	..	..	..	·01	..	..	..	..	·01	·04	·02	..	..	..	..	..	·01	..	·02
7	1·54	1·52	1·19	1·07	·99	1·11	1·07	1·02	·64	·63	·95	1·17	1·20	·87	·20	1·10	1·02	1·23	1·08	·91	·18	·72	·86	·73	·92	·98
8	·07	·13	·11	·12	·10	·12	·20	·10	·54	·20	·06	·07	·22	·06	·66	·06	·06	·07	·05	·14	·03	·14	·21	·44	·16	·06
9	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
15	..	..	·02	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..
16	·01	..	·02	..	·02	·02	·05	..	·03	·02	·03	·05	·02	·01	..	..	·01	..	..	..	..	..	·02	·01	·01	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	·01	·01	·02	·03	..	·01	..	..	·02	·01	·01	..	..	..	·01	..	..	·02	..	..	..	..	·02	·03	..	..
19	·01	..	·01	·01	..	·01	..	..	..	·01	..	..	·01	..	..	..	..	..	..	·02	..	·01	·02	·01	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	·01	..	..	..	..	..	..	·01	..	..	..	..	..	·02	..	..	..	..	..	..	..	·03	·01	..	..
22	..	..	..	..	..	·01	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	·01	·03	·02	..	..	..	·01	·01	..	..	..	..	..	..	..	..	·01	..	..	·02	·01	..	..
24	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	·01	·03	·01	..	..	·04	..	·02	..	..	·06	..	..	..	..	..	·02	..	..	..	..	·02	..	..	..
26	·11	·12	·11	·11	·09	·12	·10	·09	·12	·12	·08	·09	·12	·07	·07	·11	·10	·08	·10	·12	·06	·01	·12	·15	·12	·10
27	·01	..	..	·01	·01	·01	..	·05	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	·03	·03	..	·01	·01	·02	..	·02	·02	..	·02	..	·04	·01	·01	..	·01	·04	..	·02	..	·01	·03	·04	·01	..
29	·02	..	·02	·01	..	·01	·10	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	·01	..	..
30	..	·02	·02	·03	·02	·04	·04	·04	·03	·02	·03	·05	·01	·02	·03	·04	·03	·03	·02	·03	..	..	·04	·04	·02	·01
31	·01	·01	·02	·04	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1·87	1·88	1·60	1·49	1·27	1·50	1·62	1·32	1·45	1·03	1·20	1·49	1·62	1·04	1·01	1·32	1·27	1·51	1·26	1·25	·27	·89	1·39	1·51	1·25	1·17
†	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

* The figures in this row give the totals for the month. † The totals from January 1st.

NOTES.

JANUARY, 1908.

The month has been very changeable and unhealthy, influenza, diphtheria, and scarlet fever being more than usually prevalent for January. A very heavy snow and rainstorm occurred in the evening of the 7th and morning of the 8th; the snow, which was very wet, varying in depth from eight inches at Epsom and six inches at Merstham to three inches and less throughout the district. There was fog on many days, and it was especially thick between the 18th and 24th. There was also hail on the 28th, and slight snow on the 30th. During the snowstorm on the 7th–8th, a sixty-foot telegraph-pole snapped and fell at Sanderstead. Skating occurred throughout the district on the 3rd to 5th, and 11th to 14th. Birds were singing whenever there were warm spells. The weather, on the whole, has been favourable both for farmers and gardeners. On the 22nd the rain at West Norwood was amber-coloured. Solar haloes were seen at Epsom on the 17th, and at Greenwich on the 30th; and lunar haloes were observed at Wallington on the 12th, and at Nutfield, Epsom, Benhilton, and Greenwich on the 14th; and a lunar corona at Nutfield on the 18th. Thunder was heard at Upper Gatton on the 27th. The rainfall was from one-fifth to rather over one-fourth below the average. The mean temperature was from 1°·5 to 2°·0 below the average, and was at Wallington and Worcester Park 36°·5, at Croydon (Park Hill House) 36°·1, at Warlingham 36°·0, and at Epsom 35°·3. At Croydon (Park Hill House) both evaporation and percolation were below the average. There were recorded at Wallington 50·2 hours of sunlight, which is 4·3 hours, or two per cent., below the January average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
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NOTES.

FEBRUARY, 1908.

The month has been mild and dry as a whole, but very unhealthy, influenza being extremely prevalent, and in portions of the district cases of diphtheria and scarlet fever have been rather numerous. There were slight snow showers after the 24th; that on the 29th—which, however, soon melted—being about one inch in depth. Agricultural and horticultural work has been carried on without a check. Snowdrops and yellow crocus are in full bloom, but the winter aconite is over. Fruit trees look well. The rooks began to build about Nutfield on the 23rd. On the 13th the rain at Norwood was amber-coloured. Sheet lightning was observed at Sanderstead on the 28th. There was a gale throughout the district on the 22nd. Solar haloes were observed at Epsom on the 13th, 23rd, and 29th, and at Greenwich on the 29th; whilst lunar ones were seen at Epsom and Greenwich on the 13th and 16th, at Betchworth and Benhilton on the 14th and 16th, at Sanderstead on the 13th, and at Wallington on the 16th. The rainfall at Greenwich is only slightly below the ninety years' average, but at Croydon and Wallington it is about two-thirds of the average of those places: whilst the number of rainy days is in excess of the average. The mean temperature of the month varies between 3° and 1°·5 above the average, and was at Wallington 41°·8, at Worcester Park 41°·7, at Croydon (Park Hill House) 41°·3, at Epsom 40°·8, and at Warlingham 40°·3. At Croydon (Park Hill House) evaporation was 0·415 in., which is above the average, whilst percolation was less than half of the average. There were recorded at Wallington 61·6 hours of sunlight, which is 2·3 hours, or two per cent., below the February average of the twenty years 1886-1905.

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Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
2	..	·02	·01	..	·01	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	·05	·04	·03	·05	·07	·07	·07	·05	·05	·05	·02	·04	·05	..	·05	·03	·03	·03	·02	·06	·05	·05	·05	·04
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·03	..
6	..	..	·01	..	·01	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	·02	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	·02	..	·01	..	..	..	..	·02	..	..	..	..	..	..	..	..	·02	..	..	..	·01	·04	..
10	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·04	..	·03	·03	·02	·01	·02	·02	·02	·02	..	·02	..	..	·03	·08	·03	·03	·05	·02	·01	·03	..	·01	·03	..
14	·05	·10	..	..	·01	·06	·06	·04	·05	·03	·02	·04	..	..	·04	·03	·02	·01	..	..	..	·02	·06	·03	·05	·02
15	·14	·10	·09	·11	·10	·16	·15	·14	·15	·17	·16	·22	·20	..	·14	·13	·13	·10	·11	·08	·05	·13	·14	·17	·18	·27
16	·34	·41	·44	·32	·33	·27	·32	·20	·25	·23	·21	·32	·30	·32	·30	·27	·32	·25	·30	·26	·21	·33	·39	·38	·25	·24
17	·09	·06	·08	·14	·12	·09	·09	·10	·10	·10	·12	·20	·09	·17	·17	·14	·12	·14	·11	·09	·12	·11	·09	·12	·18	·32
18	·06	..	..	·05	·01	·01	·01	·02	·01	..	..	·06	·12	·03	·04	..	·02	·01	..	·02	..	..	..	..	..	·08
19	..	..	·02	..	·04	·02	..	..	..	..	·01	..	..	..	..	..	..	..	..	·03	·01	..	..	..	..	..
20	·07	·06	·03	·04	·05	·04	·07	·07	·05	·05	·04	·10	·11	·08	·07	·05	·06	·06	·09	..	·04	·05	·04	·05	·06	·12
21	..	·01	..	..	..	·01	·02	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·07	·07	·10	·10	·10	·09	·13	·12	·10	·08	·07	·18	·21	·08	·14	·10	·12	·09	·09	·09	·06	·09	·10	·10	·15	·18
23	..	·02	·01	·03	·03	·01	·02	·02	·02	..	..	..	·04	..	·02	..	·01	..	..	·02	·01	·04	·02	·04	·03	..
24	·10	·07	·11	·03	·12	·12	·10	·17	·17	·17	·18	·21	·18	·21	·19	·14	·08	·14	·10	·09	·03	·10	·13	·11	·14	·03
25	·09	·03	·07	·06	·15	·11	·16	·13	·14	·13	·14	·12	·13	·13	·14	·15	·13	·07	·07	·11	·09	·09	·15	·10	·13	·05
26	·10	·12	·10	·09	·05	·04	·09	·08	·08	·07	·06	·07	·08	·06	·07	·09	·10	·07	·07	·06	·08	·08	·08	·09	·08	·01
27	·04	·07	·09	·11	·08	·09	·09	·08	·10	·08	·03	·09	·19	·09	·11	·06	·12	·09	·13	·09	·09	·08	·10	·11	·09	·29
28	·07	·06	·06	·04	·07	·01	·07	·05	·04	·04	·07	·07	·08	·08	·05	·06	·06	·02	·06	·04	·03	·06	·06	·05	·03	·18
29	..	·03	..	..	·01	·01	·01	·01	..	..	..	..	..	..	·02	..	·01	·04	..	·01	·01	·05	..	..	..	·08
*	1·26	1·23	1·30	1·21	1·35	1·21	1·50	1·37	1·39	1·22	1·18	1·75	1·75	1·29	1·59	1·30	1·38	1·16	1·23	1·06	·86	1·34	1·41	1·42	1·52	1·91
†	3·41	3·05	3·40	3·24	3·16	2·99	3·86	3·16	3·01	3·04	2·79	3·54	3·60	2·84	3·51	3·31	3·41	2·93	2·48	2·77	1·96	3·14	2·97	3·32	3·16	4·15

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NOTES.

FEBRUARY, 1908.

The month has been mild and dry as a whole, but very unhealthy, influenza being extremely prevalent, and in portions of the district cases of diphtheria and scarlet fever have been rather numerous. There were slight snow showers after the 24th; that on the 29th—which, however, soon melted—being about one inch in depth. Agricultural and horticultural work has been carried on without a check. Snowdrops and yellow crocus are in full bloom, but the winter aconite is over. Fruit trees look well. The rooks began to build about Nutfield on the 23rd. On the 13th the rain at Norwood was amber-coloured. Sheet lightning was observed at Sanderstead on the 28th. There was a gale throughout the district on the 22nd. Solar haloes were observed at Epsom on the 13th, 23rd, and 29th, and at Greenwich on the 29th; whilst lunar ones were seen at Epsom and Greenwich on the 13th and 16th, at Betchworth and Benhilton on the 14th and 16th, at Sanderstead on the 13th, and at Wallington on the 16th. The rainfall at Greenwich is only slightly below the ninety years' average, but at Croydon and Wallington it is about two-thirds of the average of those places; whilst the number of rainy days is in excess of the average. The mean temperature of the month varies between 3° and 1°·5 above the average, and was at Wallington 41°·8, at Worcester Park 41°·7, at Croydon (Park Hill House) 41°·3, at Epsom 40°·8, and at Warlingham 40°·3. At Croydon (Park Hill House) evaporation was 0·415 in., which is above the average, whilst percolation was less than half of the average. There were recorded at Wallington 61·6 hours of sunlight, which is 2·3 hours, or two per cent., below the February average of the twenty years 1886–1905.

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Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
2	..	·02	·01	..	·01	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	·05	·04	·03	·05	·07	·07	·07	·05	·05	·05	·02	·04	·05	..	·05	·03	·03	·03	·02	·06	·05	·05	·05	·04
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·03	..
6	..	..	·01	..	·01	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	·02	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	·02	..	·01	..	..	..	..	·02	..	..	..	..	..	..	..	..	·02	..	..	..	·01	·04	..
10	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·04	..	·03	·03	·02	·01	·02	·02	·02	·02	..	·02	..	..	·03	·08	·03	·03	·05	·02	·01	·03	..	·01	·03	..
14	·05	·10	..	..	·01	·06	·06	·04	·05	·03	·02	·04	..	..	·04	·03	·02	·01	..	..	..	·02	·06	·03	·05	·02
15	·14	·10	·09	·11	·10	·16	·15	·14	·15	·17	·16	·22	·20	..	·14	·13	·13	·10	·11	·08	·05	·13	·14	·17	·18	·27
16	·34	·41	·44	·32	·33	·27	·32	·20	·25	·23	·21	·32	·30	·32	·30	·27	·32	·25	·30	·26	·21	·33	·39	·38	·25	·24
17	·09	·06	·08	·14	·12	·09	·09	·10	·10	·10	·12	·20	·09	·17	·17	·14	·12	·14	·11	·09	·12	·11	·09	·12	·18	·32
18	·06	..	..	·05	·01	·01	·01	·02	·01	..	..	·06	·12	·03	·04	..	·02	·01	..	·02	..	..	..	..	..	·08
19	..	..	·02	..	·04	·02	..	..	..	..	·01	..	..	..	..	..	..	..	..	·03	·01	..	..	..	..	..
20	·07	·06	·03	·04	·05	·04	·07	·07	·05	·05	·04	·10	·11	·08	·07	·05	·06	·06	·09	..	·04	·05	·04	·05	·06	·12
21	..	·01	..	..	..	·01	·02	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·07	·07	·10	·10	·10	·09	·13	·12	·10	·08	·07	·18	·21	·08	·14	·10	·12	·09	·09	·09	·06	·09	·10	·10	·15	·18
23	..	·02	·01	·03	·03	·01	·02	·02	·02	..	..	..	·04	..	·02	..	·01	..	..	·02	·01	·04	·02	·04	·03	..
24	·10	·07	·11	·03	·12	·12	·10	·17	·17	·17	·18	·21	·18	·21	·19	·14	·08	·14	·10	·09	·03	·10	·13	·11	·14	·03
25	·09	·03	·07	·06	·15	·11	·16	·13	·14	·13	·14	·12	·13	·13	·14	·15	·13	·07	·07	·11	·09	·09	·15	·10	·13	·05
26	·10	·12	·10	·09	·05	·04	·09	·08	·08	·07	·06	·07	·08	·06	·07	·09	·10	·07	·07	·06	·08	·08	·08	·09	·08	·01
27	·04	·07	·09	·11	·08	·09	·09	·08	·10	·08	·03	·09	·19	·09	·11	·06	·12	·09	·13	·09	·09	·08	·10	·11	·09	·29
28	·07	·06	·06	·04	·07	·01	·07	·05	·04	·04	·07	·07	·08	·08	·05	·06	·06	·02	·06	·04	·03	·06	·06	·05	·03	·18
29	..	·03	..	..	·01	·01	·01	·01	..	..	..	..	..	..	·02	..	·01	·04	..	·01	·01	·05	..	..	..	·08
*	1·26	1·23	1·30	1·21	1·35	1·21	1·50	1·37	1·39	1·22	1·18	1·75	1·75	1·29	1·59	1·30	1·38	1·16	1·23	1·06	·86	1·34	1·41	1·42	1·52	1·91
†	3·41	3·05	3·40	3·24	3·16	2·99	3·86	3·16	3·01	3·04	2·79	3·54	3·60	2·84	3·51	3·31	3·41	2·93	2·48	2·77	1·96	3·14	2·97	3·32	3·16	4·15

* The figures in this row give the totals for the month. † The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for February is 1·53 in., and from 1st January 3·34 in.* **February, 1908.**

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (Place Fell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn. N. rd.)	Croydon (Wob. rd.)	Croydon (Park H. R.)	Croydon (Pk. H. Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01
2	..	..		..	..	·01	..	..	..	·01	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
3	·07	·05		·04	·04	·02	·04	·04	·04	·04	·03	·02	·03	·04	..	·03	·02	·01	·03	·03	·02	·03	..	·03	·04	..
4	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	·01	·01		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..		·02	..	..	..	..	·02	·02	·01	..	·01	·02	..	..	..	..	·01	..	..	..	..	..	·02	..
7	..	..		..	..	·01	..	..	..	·01	..	..	·01	..	..	..	..	..	..	..	..	..	..	·01	·01	·01
8	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	·01	·01		·01	..	..	·03	..	·02	·03	..	..	·01	..	·03	..	..	..	..	·01	..	..	..	..	..	..
10	..	..		·01	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..
11	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·01	·01		·01	·01	·03	..	..	·03	·03	·01	·01	·01	·02	..	·03	·01	·01	·02	·01	·01	·03	·01	..	·02	·01
14	..	..		..	..	..	..	..	..	·02	..	..	..	·04	..	·01	..	·04	·02	..	..	..	·01	·01	·01	·01
15	..	..		·21	·06	·07	..	·03	·05	·04	·04	·04	·06	·19	·05	·04	·05	·07	·06	·05	·05	·05	·05	·05	·06	·05
16	·11	·10		·36	·30	·32	·36	..	·31	·25	·27	·24	·24	·38	·15	·07	·18	·17	·20	·20	·16	·22	·18	·17	·21	·23
17	·64	·57		·10	·08	·11	·11	·37	·12	·11	·11	·14	·16	·12	·10	·23	·12	·12	·12	·11	·10	·10	·11	·11	·11	·10
18	·13	·10		·02	..	..	..	..	·01	·03	·02	·01	·02	..	..	..	..	·01	·01	·02	·03	·04	·03	·03	·03	·04
19	..	..		..	..	·01	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
20	·07	·05		·08	·07	·08	..	·04	·06	·06	·09	·08	·09	·09	·08	·07	·09	·09	·09	·10	·10	·10	·14	·13	·13	·12
21	..	..		·01	..	..	..	·04	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..
22	·15	·13		·13	·10	·08	·08	·05	·07	·07	·06	·06	·09	·08	·07	·05	·10	·09	·09	·09	·07	·07	·07	·07	·10	·08
23	..	..		·02	..	·01	..	..	·01	·03	·01	·02	..	..	..	..	·01	..	·01	..	..	..	..	..	..	·01
24	·12	·09		·17	·15	·14	·06	·07	·06	·10	·15	·15	·15	·12	·10	·12	·09	·07	·10	·12	·08	·13	·12	·14	·14	·16
25	·08	·07		·14	·10	·12	·09	·03	·08	·12	·11	·12	·12	·10	·07	·08	·07	·07	·11	·13	·09	·12	·11	·12	·13	·13
26	·07	·05		·08	·06	·06	..	·13	·08	·08	·05	·04	·07	·18	·06	·11	·06	·05	·07	·06	·05	·06	·05	·05	·06	·06
27	·06	·04		·10	·09	·11	·10	·03	·04	·10	·10	·07	·05	·12	·10	·11	·12	·16	·11	·14	·12	·11	·10	·07	·11	·14
28	·14	·06		·05	·04	·04	·04	·09	·10	·09	·04	·06	·11	·05	·05	·05	·06	·06	·04	·03	·02	·06	·04	·05	·04	·06
29	..	..		..	·02	..	..	·03	..	..	..	..	·01	..	..	·03	..	..	·01	·01	..	..	..	..	..	..
*	1·67	1·34	1·42	1·56	1·13	1·22	·91	·97	1·10	1·24	1·10	1·06	1·24	1·55	·86	1·04	·99	1·04	1·10	1·11	·90	1·12	1·02	1·04	1·23	1·22
†	3·42	2·93	3·01	3·50	2·78	2·90	2·70	2·68	2·95	3·74	2·62	2·49	3·18	3·21	2·26	2·58	2·36	2·63	2·77	2·72	1·98	2·70	2·29	2·55	2·89	2·84

MONTHLY GAUGE.

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for February is 1·53 in., and from 1st January 3·34 in.* **February, 1908.**

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump. St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew. Wks.)	Wimbledon (The Downs)	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew. Wks.)	Kingston (County H.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	·01	..	·01	·02	·01	·02	..
3	·03	·04	·04	..	..	·03	·03	·01	·02	..	·06	·04	·03	·04	·03	·02	·03	..	·02	·02	..	·02	·02	·02	·03	·03
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	·01	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	·02	·02	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·01	·01	..	..	..	..	..	..	..	..	..	·01	·01	·01	..	..	·02	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	·01	..	·03	..	·02	..	..	·02	·05	..	·01	..	·01	..	..	·02	·04	..	·01	..	..	·02	·01	·02	·01
10	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·02	·02	·01	·01	..	..	..	..	·01	·01	..	·01	·01	·01	..	..	·01	·01	..	·01	·01	·02	..	·01	..	·01
14	·01	·01	..	..	..	..	..	·01	..	·01	..	·02	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
15	·05	·05	·06	·07	·08	·09	·09	·08	·06	·09	·07	·07	·06	·06	·11	·06	·08	·06	·05	·06	·04	·06	·06	·07	·10	·07
16	·26	·22	·26	·25	·27	·22	·22	·18	·17	·14	·17	·15	·16	·15	·15	·17	·22	·22	·20	·23	·18	·25	·23	·24	·19	·27
17	·12	·11	·11	·14	·16	·13	·10	·09	·11	·12	·12	·14	·13	·15	·12	·17	·20	·18	·13	·15	·14	·16	·15	·16	·21	·15
18	·03	·04	·04	·04	..	·08	·09	·05	·10	·09	·08	·05	·06	·05	·02	·01	·01	..	..	..	..	·01	·01	..	..	..
19	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..
20	·11	·13	·12	·14	·16	·16	·16	·12	·11	·14	·15	·16	·20	·15	·08	·11	·11	·09	·07	·07	·04	·04	·05	·08	·07	·10
21	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
22	·09	·08	·08	·07	·10	·09	·10	·19	·07	·08	·07	·12	·05	·10	·09	·04	·12	·10	·04	·09	·06	·05	·09	·10	·08	·02
23	·02	..	·01	..	..	..	·02	·02	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..
24	·15	·19	·24	·25	·16	·13	·12	·03	·11	·16	·11	·27	·27	·21	·09	·08	·10	·08	·07	·06	·02	·02	·08	·10	·11	·12
25	·12	·13	·12	·11	·13	·12	·15	·09	·12	·13	·11	·15	·13	·13	·09	·07	·09	·08	·11	·10	·05	·05	·16	·17	·15	·13
26	·07	·06	·07	·07	·09	·08	·06	·06	·06	·07	·07	·07	·06	·07	·06	·06	·08	·07	·06	·07	·06	·07	·07	·08	·07	·07
27	·14	·11	·17	·11	·13	·05	·11	·02	·05	·09	·09	·10	·07	·09	·13	·07	·10	·10	·11	·08	·08	·08	·09	·13	·10	·05
28	·06	·07	·07	·05	·05	·11	·03	·03	..	·05	·03	·11	·04	·06	·06	·04	·06	·06	·03	·05	·03	·04	·04	·06	·06	·03
29	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	·02	..	·01	..	..	..	..	..	·02	..	·03	..
*	1·32	1·30	1·41	1·34	1·33	1·31	1·28	·99	1·01	1·23	1·13	1·49	1·28	1·32	1·05	·90	1·30	1·09	·89	1·01	·71	·88	1·12	1·26	1·24	1·06
†	3·13	2·86	3·09	3·04	2·93	3·24	2·71	2·08	2·53	2·95	2·19	2·77	2·66	2·78	2·58	2·26	2·92	2·50	2·02	2·60	2·20	2·80	2·78	3·17	3·12	2·34

* The figures in this row give the totals for the month. † The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for February is 1·53 in., and from 1st January 3·34 in.* **February, 1908.**

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandswth. Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
2	·02	..	·02	·01	..	·01	..	..	..	·01	..	..	..	..	..	..		·03	..	..	..	..	..	..	..	..
3	·03	·01	·03	·04	·03	·04	·04	..	·03	·03	·01	·02	·02	·02	·03	·01		·02	·02	·04	..	·03	·04	·04	·02	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
5	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	·01	..	..	·01	·01	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
7	..	..	·02	·02	..	·01	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	·01	..	..
8	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
9	·01	·01	·01	·02	..	·01	·03	·05	·02	·01	..	..	..	..	..	..		..	..	·01	..	·01	·02	..	..	..
10	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	·02	..		..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
13	·02	·01	·02	..	..	·01	·02	..	·01	·01	..	..	..	·01	..	..		·03	..	..	..	·01	·03	·01	..	..
14	..	..	..	..	..	..	..	·02	·02	..	·01	..	..	..	..	..		..	..	..	..	..	..	·01	..	..
15	·08	·09	·08	·08	·05	·07	·07	·07	·08	·10	·09	·15	·04	·26	·10	·14		·08	·06	·07	·06	·07	·08	·11	·10	·09
16	·25	·22	·23	·21	·13	·22	·22	·05	·22	·24	·15	·21	·27	..	·30	·25		·43	·26	·16	·26	·22	·32	·22	·21	·38
17	·19	·27	·18	·22	·20	·19	·17	·32	·16	·08	·10	·11	·14	·14	·09	·22		·05	·16	·10	·14	·18	·19	·19	·19	·04
18	·03	·03	·03	·08	·06	·04	·09	·08	·06	·07	·11	..	·24	·06	·05	·08		·07	·04	·03	·02	·16	·13	·24	·31	·22
19	..	..	..	..	..	..	..	·07	..	..	·01	..	..	..	..	..		..	..	..	..	..	..	..	..	..
20	·11	·11	·13	·09	·11	·15	·17	·04	·12	·09	·10	·23	·11	·08	·09	·14		·11	·09	·07	..	·05	·11	·10	·09	·05
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
22	·07	·07	·06	·06	·04	·04	·05	·06	·08	·05	·17	·17	·17	·10	·07	·08		·11	·07	·11	·03	·07	·14	·08	..	·01
23	..	..	..	·01	..	..	..	..	..	·01	·02	·02	..	·01	..	..		·02	·01	..	..	·01	..	·02	·11	·04
24	·10	·09	·07	·10	·12	·14	·25	·27	·28	·24	·03	·07	·15	·22	·18	·21		·10	·15	·21	·17	·11	·11	·13	·16	·14
25	·14	·15	·09	·10	·13	·13	·14	·14	·15	·15	·09	·05	·13	·13	·10	·16		·12	·12	·14	·10	·06	·08	·14	·13	·07
26	·09	·10	·08	·07	·05	·07	·07	·08	·08	·05	·05	·14	·07	·03	·02	·07		·07	·06	·12	·02	..	·08	·07	·06	·02
27	·06	·06	·07	·07	·05	·09	·07	·06	·06	·04	·02	·03	·02	·02	·02	·06		·04	·02	·03	·04	..	·04	·03	·02	·02
28	·07	·09	·04	·03	·06	·07	·06	·06	·10	·03	·02	·04	·05	·04	·03	·03		·09	..	·02	·04	·02	·04	·06	·04	·03
29	·01	..	·01	..	..	..	..	·08	..	..	..	·05	..	..	·01	..		..	·04	·02	·02	..	..	..	..	..
*	1·29	1·33	1·17	1·21	1·03	1·30	1·45	1·45	1·48	1·22	·98	1·29	1·41	1·12	1·11	1·45		1·37	1·10	1·13	·90	1·00	1·41	1·46	1·44	1·11
†	3·16	3·21	2·77	2·70	2·30	2·80	3·07	2·77	2·93	2·25	2·18	2·78	3·03	2·16	2·12	2·77		2·88	2·36	2·38	1·17	1·89	2·80	2·97	2·69	2·28

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·24	·35	·28	·25	·23	·18	·24	·27	·20	·19	·15	·07	·12	·19	·07	·26	·25	·04	·12	·18	·14	·35	·29	·25	·11	·15
2	..	·02	..	..	..	·01	·01	·01	..	..	·01	·14	·02	..	..	..	·01	..	·06	·30	·02	·01	..	..	·20	·08
3	·19	·34	·21	·21	·34	·35	·36	·40	·38	·37	·37	·28	·36	·33	·45	·37	·31	·44	·40	·08	·20	·35	·30	·32	·34	·14
4	..	..	..	..	..	·01	..	..	..	..	..	·01	..	·01	·02	..	..	..	..	·60	·01	..	..	..	..	·12
5	·59	·57	·78	·75	·57	·43	·48	·33	·43	·38	·42	·46	·46	·51	·43	·44	·46	·36	·50	·04	·61	·54	·50	·52	·49	·65
6	·08	·10	·11	·08	·07	·05	·11	·08	·07	·08	·07	·08	·05	·08	·07	·07	·06	·18	·08	·06	·05	·07	·06	·06	·08	·10
7	·09	..	·05	·06	·04	·03	·06	·05	·05	·04	·03	..	·03	·06	·06	·06	·05	·03	..	·02	·02	·03	·04	·05	·07	·06
8	·22	·20	·22	·18	·18	·12	·19	·12	·11	·13	·09	·22	·09	·08	·12	·14	·18	·11	·14	·09	·08	·12	·10	·15	·15	·25
9	·09	·08	·10	..	·11	·05	·09	·06	·06	·10	·10	·14	·13	·10	·10	·11	·12	·13	·12	·07	·05	·19	·11	·12	·16	·05
10	·04	·04	·08	·02	·08	·04	·08	·07	·05	·06	·04	·06	·06	·03	·06	·09	·06	..	·07	·06	·06	·06	·09	·05	·06	·07
11	..	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	·01	..	..	..	..	..	..	·05	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·06	·05	·06	·05	·04	·04	·07	·06	·06	·05	·03	·04	·04	·04	·04	·05	·08	·04	·04	·02	·02	·05	·06	·05	·09	·08
16	·08	·08	·08	·08	·09	·09	·11	·13	·13	·11	·10	·08	·07	·08	·05	·12	·14	·17	·12	·10	·10	·13	·13	·12	·13	·06
17	..	..	..	..	·03	..	·01	..	..	..	..	..	..	..	..	..	·03	..	..	·02	..	·04	..	·01	..	..
18	·03	·03	·02	·05	..	..	..	..	..	..	..	·02	..	..	..	..	..	·03	..	·03	..	·01	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·39	·43	·47	·41	·27	·26	·29	·21	·27	·24	·26	·23	·24	·25	·24	·30	·28	·26	·35	·39	·29	·38	·27	·03	·28	·24
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·12	·10	·14	·12	·12	·08	·11	·07	·06	·05	·02	·04	·06	·03	·08	·05	·08	·05	·12	·10	·13	·07	·07	·07	·05	·03
25	·44	·43	·47	·48	·45	·27	·32	·32	·33	·29	·25	·60	·60	·59	·40	·38	·45	·43	·50	·47	·43	·45	·45	·45	·45	·54
26	..	·02	..	·03	·02	..	·03	·03	·02	·02	·06	·03	·03	·01	·01	·02	·03	..	·04	·02	·02	·03	·02	·05	·06	·17
27	·12	·14	·18	·18	·14	·15	·12	·09	·11	·12	·09	·10	·06	·09	·07	·11	·12	·17	·13	·12	·09	·14	·12	·12	·15	·11
28	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	·12	·10	·11	·11	·09	·10	·12	·11	·11	·11	·09	·15	·13	·17	·11	·10	·11	·12	·12	·11	·15	·13	·10	·10	·13	·14
30	·46	·50	·46	·48	·47	·55	·50	·45	·45	·49	·52	·42	·36	·33	·36	·36	·43	·39	·39	·40	·31	·37	·37	·29	·43	·34
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..
*	3·36	3·59	3·82	3·54	3·34	2·81	3·30	2·86	2·89	2·83	2·72	3·17	2·91	2·98	2·74	3·03	3·26	2·96	3·30	3·28	2·78	3·52	3·08	2·87	3·43	3·38
†	6·77	6·64	7·22	6·78	6·50	5·80	7·16	6·02	5·90	5·87	5·51	6·71	6·51	5·82	6·25	6·34	6·67	5·89	5·78	6·05	4·74	6·66	6·05	6·19	6·59	7·53

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (PlaceFell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump.St.)	Sutton (Waterwk.)	Sutton (Sew.Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (ParkH.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·02	·01		·22	·23	·27	·21	·21	·15	·18	·20	·25	·27	·36	·20	·12	·20	·23	·24	·23	·14	·24	·22	·20	·25	·26
2	..	..		..	·01	..	..	..	·06	·04	..	..	·01	..	·01	..	·01	·02	·01	·01	·01	..	·01	·01	..	·01
3	·40	·37		·44	·32	·34	·30	·31	·37	·52	·36	·33	·29	·34	·26	·29	·28	·23	·26	·26	·27	·34	·31	·27	·29	·31
4	..	..		·02	·02	·05	..	..	..	·01	·03	·03	·01	..	..	·02	..	·01	·03	·02	·02	·02	·05	·03	·05	·04
5	·48	·45		·61	·58	·73	·75	·70	·67	·74	·63	·60	·51	·74	·67	·61	·63	·58	·68	·62	·58	·69	·52	·55	·57	·64
6	·25	·23		·07	·05	·04	·04	·05	·07	·06	·05	·07	·15	·02	·02	·04	·04	·05	·04	·04	·03	·03	·02	·03	·03	·03
7	..	..		·04	·02	·01	·03	..	·03	·03	·02	·01	·02	·07	..	·03	·01	·02	·02	·01	·01	·01	·01	·01	·02	·02
8	·17	·14		·16	·09	·10	·09	·12	·05	·07	·07	·08	·10	·07	·05	·02	·05	·05	·06	·06	·05	·06	·04	·06	·07	·06
9	·19	·17		·22	·11	·08	..	·03	·09	·08	·06	·05	·09	·12	·05	·05	·04	·04	·09	·07	·04	·06	·04	·05	·07	·06
10	..	..		·04	·03	·04	·05	·04	·03	·05	·03	·02	·04	·08	·05	·06	·05	·08	·05	·03	·02	·03	·02	·02	·03	·04
11	..	..		..	..	..	..	..	..	..	..	..	..	..	..	·01	..	·02	..	..	..	..	..	..	..	..
12	..	..		..	..	..	..	..	..	..	·01	..	·01	..	..	..	..	..	·01	..	..	..	..	..	..	..
13	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·09	·08		·05	·04	·04	·04	·05	·04	·04	·02	·02	·02	·11	·02	·03	·04	·03	·03	·03	·02	·03	·02	·02	·03	·03
16	·05	·04		·06	·06	·08	·12	·10	·14	·12	·10	·10	·09	·12	·13	·10	·15	·11	·13	·10	·09	·09	·05	·04	·07	·10
17	..	..		..	·01	..	..	..	..	·01	..	..	..	..	·02	..	·02	..	·02	·01	·01	·01	·01	..	..	..
18	..	..		·01	..	..	..	..	·03	..	·02	..	·03	·01	..	..	·01	..	..	..	..	..	..	..	·01	·02
19	..	..		..	..	..	·02	..	..	·02	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..		..	..	..	..	..	..	..	..	·01	..	..	..	·03	..	..	..	..	..	..	..	..	..	..
21	..	..		..	..	·03	..	..	..	..	..	..	..	..	..	·02	·01	..	..	..	..	..	..	..	..	..
22	·24	·21		·35	·25	·28	·22	·25	·29	·29	·22	·24	·23	·48	·22	·18	·22	·21	·23	·20	·16	·22	·19	·20	·21	·24
23	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·01	·01		·09	·08	·08	·09	·35	·08	·09	·07	·05	·03	·04	·08	·11	·09	·07	·08	·08	·07	·08	·09	·07	·09	·09
25	·66	·62		·56	·47	·55	·49	·27	·46	·48	·47	·50	·52	·62	·48	·53	·50	·47	·43	·46	·40	·54	·57	·53	·56	·50
26	·05	·04		·04	·06	·05	..	..	·06	·03	·06	·07	·08	·04	·02	·03	·01	·02	·03	·03	·02	·02	·02	·03	·02	·03
27	·03	·02		·15	·12	·14	·13	·13	·15	·12	·10	·09	·12	·12	·08	·08	·09	·08	·08	·08	·06	·06	·06	·06	·08	·07
28	..	..		..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..
29	·20	·18		·12	·10	·14	·15	·15	·12	·16	·11	·11	·14	·11	·10	·12	·10	·10	·13	·12	·09	·12	·09	·11	·12	·13
30	·33	·27		·38	·30	·34	·30	·30	·34	·34	·25	·28	·30	·28	·32	·32	·32	·30	·33	·32	·32	·32	·31	·27	·34	·31
31	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	3·17	2·84	2·97	3·63	2·95	3·39	3·03	3·06	3·23	3·48	2·89	2·91	3·07	3·75	2·78	2·80	2·87	2·72	2·98	2·78	2·41	2·97	2·65	2·56	2·91	2·99
†	6·59	5·77	5·98	7·13	5·73	6·29	5·73	5·74	6·18	7·22	5·51	5·40	6·25	6·96	5·04	5·38	5·23	5·35	5·75	5·50	4·39	5·67	4·94	5·11	5·80	5·83

MONTHLY GAUGE.

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for March is 1·51 in., and from 1st January 4·85 in.* **March, 1908.**

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump.St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (TheDowns	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·28	·23	·16	·06	·16	·08	·17	·13	·17	·17	·09	·20	·18	·20	·20	·16	·18	·15	·10	·13	·09	·14	·13	·13	·13	·11
2	..	·01	·01	..	..	·11	..	..	..	·02	..	·02	·01	·02	·01	·01	·02	·01	·01	·02	·01	·02	·01	·01	..	·01
3	·32	·24	·25	·48	·35	·11	·36	·13	·32	·33	·18	·37	·28	·31	·27	·21	·26	·24	·26	·26	·36	·37	·27	·28	·28	·21
4	·04	·03	·03	..	..	·22	..	·01	·02	·01	·02	·03	·04	·02	·01	..	·01	·02	..	..	·04	·01	·01	..	..	·02
5	·63	·59	·67	·64	·60	·53	·55	·39	·40	·38	·41	·44	·37	·41	·61	·26	·38	·38	·39	·51	·34	·38	·42	·44	·33	·27
6	·04	·03	·05	·07	·05	·17	·06	·07	·03	·05	·05	·06	·02	·04	·03	·02	·04	·02	·01	·04	·03	·04	·03	·03	·15	·02
7	·03	·02	·01	·01	·02	·02	·02	·02	·02	·02	·01	·04	·02	·03	·01	·02	·03	·01	·01	·02	·01	·02	·02	·02	·03	·03
8	·09	·09	·09	·08	·04	·09	·09	·04	·05	·05	·05	·06	·05	·06	·04	·03	·06	·04	·02	·05	·03	·04	·04	·05	·04	·03
9	·06	·07	·10	·07	·05	·11	·13	·05	·04	·04	·06	·05	·03	·05	·05	·05	·06	·06	·03	·05	·06	·05	·06	·05	·06	..
10	·04	·03	·03	·05	·06	·05	·05	·05	..	·04	·03	·05	·03	·05	·06	·05	·07	·06	·02	·03	·05	·06	·04	·03	·03	·05
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..
12	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·03	·03	·03	·03	..	·03	·02	·03	·02	·03	·04	·04	·02	·03	·05	·02	·04	·03	·01	·03	·02	·02	·02	·03	·02	·03
16	·12	·07	·06	·07	·12	·10	·06	·06	..	·06	·02	·09	·06	·07	·11	·04	·10	·09	·13	·15	·08	·11	·14	·13	·13	·09
17	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	·02	..	·02	·01	..	·01	..	..	·01	..	..	..
18	·01	·02	..	..	..	..	·02	..	..	..	..	..	..	·01	..	..	·01	..	..	..	·02	..	..	..	..	..
19	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·24	·22	·28	·27	·23	·26	·19	·10	·10	·15	·18	·16	·11	·16	·20	·15	·14	·13	·11	·17	·12	·16	·16	·17	·16	·12
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·08	·06	·05	·05	·06	..	·03	·03	·03	·05	·05	·07	·06	·08	·07	·06	·08	·07	·08	·09	·12	·17	·09	·08	·04	·08
25	·52	·51	·47	·51	·50	·59	·55	·66	·58	·56	·51	·62	·71	·80	·49	·75	·73	·65	·82	·53	·51	·56	·63	·81	·78	·77
26	·04	·03	·03	·02	·03	..	·02	·02	·02	·02	·03	·05	·02	·03	·02	..	·02	·01	·02	·02	·01	·02	·01	·01	·04	·02
27	·09	·08	·11	·09	·08	·09	·07	·03	·04	·05	·06	·06	·05	·05	·06	·09	·11	·10	·08	·10	·10	·11	·10	·12	·10	·11
28	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..
29	·13	·13	·13	·14	·13	·12	·11	·08	·09	·09	·12	·11	·08	·10	·09	·08	·09	·08	·07	·11	·08	·07	·08	·10	·10	·07
30	·31	·28	·29	·33	·30	·27	·25	·16	·25	·28	·25	·30	·27	·28	·31	·30	·31	·28	·26	·35	·29	·20	·29	·25	·29	·17
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	3·11	2·80	2·85	2·97	2·78	2·95	2·75	2·06	2·18	2·40	2·16	2·82	2·41	2·81	2·71	2·30	2·76	2·44	2·43	2·68	2·37	2·55	2·58	2·74	2·71	2·21
†	6·24	5·66	5·94	6·01	5·71	6·19	5·46	4·14	4·71	5·35	4·35	5·59	5·07	5·59	5·29	4·56	5·68	4·94	4·45	5·28	4·57	5·35	5·36	5·91	5·83	4·55

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsworth Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·15	·16	·16	·17	·20	·19	·17	·10	·14	·12	·11	·07	·16	·09	·08	·19		·17	·13	·11	·09	·05	·08	·13	·12	·06
2	·02	·01	·02	·02	·02	·02	·03	·04	·03	·03	..	..	..	·02	·01	..		·02	·02	·01	·01	·01	·03	·02	·02	·01
3	·26	·27	·21	·29	·36	·27	·31	·18	·15	·23	·15	·18	·20	·25	·23	·32		·28	·19	·22	..	·21	·25	·26	·28	·24
4	..	..	·03	·06	·05	·06	..	·05	·01	..	·01	..	..	·02	·01	·02		·06	·05	..	·20	..	·03	·02	·04	·05
5	·19	·26	·28	·26	·22	·35	·35	·29	·25	·20	·34	·48	·29	·23	·20	·31		·26	·24	·29	·29	·19	·28	·26	·24	·25
6	·03	·03	·03	·03	·11	·05	·03	..	·03	·02	·07	·07	·02	·01	·01	·01		·02	..	·01	·02	..	·03	·02	·02	..
7	·04	·04	·04	·05	·02	·04	·04	·03	·02	·02	·01	·01	..	·01	..	·03		·03	·01	·01	·01	·01	·03	·02	·02	..
8	·05	·05	·05	·05	·03	·05	·05	·08	·05	·07	·04	·05	·05	·03	·03	·02		·04	·02	·04	·05	·02	·06	·05	·04	·03
9	·03	·03	·05	·06	·04	·07	·04	..	·08	·03	·05	·07	·07	·03	·02	·03		·03	·02	·02	·01	·01	·05	·06	·05	·01
10	·05	·05	·08	·05	·02	·04	·03	..	·04	·03	·09	·11	·02	·03	·02	·02		·05	·02	·03	·01	·01	·03	·04	·03	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	·02	..	..
12	·01	·01	..	..	..	·01	..	..	..	..	..	..	..	..	..	..		·01	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
15	·04	·04	·04	·02	·01	·03	·04	·11	·02	·01	·02	·05	·01	·01	·02	..		·03	·01	·01	·01	·01	·03	·01	·02	..
16	·08	·07	·09	·02	·04	·06	·06	·06	·06	·05	·07	·05	·04	·03	·05	·06		·06	·02	·05	·05	·04	·05	·04	·05	·03
17	·01	..	·01	·01	..	·01	..	..	..	..	..	·08	..	·01	..	..		..	·01	·01	..	..	..	..	..	..
18	·01	..	·02	·02	..	..	..	..	·01	..	..	..	..	..	..	..		..	·01	..	..	..	..	·01	..	..
19	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	·01	..	..	..	..	..	..
21	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
22	·09	·11	·11	·16	·10	·12	·13	..	·09	·07	·09	·12	·11	·09	·10	·12		·10	·10	·09	·10	·08	·12	·11	·09	·08
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	..	..	..	..	..	..
24	·07	·06	·07	·04	·02	·07	·08	·04	·06	·10	·03	·01	·02	·05	·10	·05		·15	·05	·09	·06	..	·05	·03	·02	·08
25	1·13	·87	·79	·83	·78	·70	·73	·77	·64	·58	·61	·86	·69	·60	·49	·90		·74	·63	·57	·37	·27	·64	·68	·67	·53
26	·02	·02	·02	·04	·03	·02	·03	·05	·03	..	·02	·02	·01	·01	·06	·02		..	..	..	..	·02	·03	·01	..	·01
27	·13	·13	·11	·10	·06	·07	·07	·07	·07	·07	·02	·02	·04	·07	·06	·09		·12	·08	·10	·07	·08	·10	·06	·06	·07
28	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..		..	..	..	..	..	..	..	..	..
29	·09	·08	·10	·10	·07	·09	·09	·10	·10	·07	·08	·07	·06	·07	·07	·08		·10	·07	·09	·06	·06	·10	·08	·07	·07
30	·19	·20	·21	·25	·25	·30	·29	·27	·28	·26	·20	·22	·29	·20	·18	·36		·20	·16	·19	·04	·16	·27	·29	·28	·18
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..	..	..	·08	..	..	..	..	..
*	2·69	2·49	2·53	2·63	2·44	2·63	2·57	2·24	2·16	1·96	2·01	2·54	2·08	1·86	1·75	2·63		2·47	1·84	1·95	1·53	1·23	2·26	2·22	2·12	1·70
†	5·85	5·70	5·30	5·33	4·74	5·43	5·64	5·01	5·09	4·21	4·19	5·32	5·11	4·02	3·87	5·40		5·35	4·20	4·33	2·70	3·12	5·06	5·19	4·81	3·98

* The figures in this row give the totals for the month.

† The totals from January 1st.

NOTES.

MARCH, 1908.

The month has been cold, wet, and sunless, and also very unhealthy, scarlet fever and influenza being prevalent. Owing to the cold period all vegetation is late, and seeds germinate very slowly. Snow fell throughout the district between the 1st and 4th, the 15th and 19th, and the 29th. Hail occurred at Beddington on the 9th, at Wallington on the 10th, at Greenwich on the 11th, and a very severe hailstorm on the 30th at Nutfield and Outwood. At Abinger on the 4th there was a remarkable black fog; and it was extremely dark on the 20th and 26th, lights being used at Kenley, Croydon, Beddington, and Wallington. A rainbow was noticed at 2.30 p.m. on the 10th at Beddington. Solar haloes were observed at Epsom on the 2nd, 3rd, 5th, 16th, 22nd, 29th, and 31st, at Greenwich on the 2nd, 3rd, 5th, and 31st, at Wallington on the 2nd, and at Upper Gatton on the 31st; and a lunar halo was seen at Epsom and Greenwich on the 14th. Sheet lightning was seen at Epsom on the 24th, and there was a thunderstorm at Greenwich on the 31st. With reference to phenological phenomena, the *Cydonia Japonica* flowered at Kew on the 20th, and the almond on the 23rd; at Epsom the peach blossomed on the 28th, the horse-chestnut budded on the 29th, and the almond and apricot flowered on the 30th; whilst bats were observed on the 23rd, and a sulphur butterfly on the 30th, and the almond blossomed at Beddington on the 31st. The rainfall is about one inch, and the number of rainy days about fifty per cent., above the average. The mean temperature of the month is about 1°·8 below the average, and was at Wallington 40°·5, at Croydon (Park Hill House) 40°·4, at Epsom 40°·3, and at Warlingham 38°·8. At Croydon (Park Hill House) evaporation was below the average, and was 0·730 in., and percolation through the chalk gauge was one inch above the average. There were recorded at Wallington 91·4 hours of sunlight, which is 24 hours, or seven per cent., below the March average, 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

NOTES.

APRIL. 1908.

A VERY remarkable month, and, with the exception of April, 1879 and 1888, the coldest April for thirty-two years. It was dry till the 22nd, and then wet and unsettled to the end. Snow fell throughout the district on the 19th, 20th, 23rd, 24th, 25th, and 26th; and the depth on the 24th was at Purley 3 in., at Croydon 2½ in., at Banstead 3 in., at Epsom 6 in., and at Betchworth 5 in.; on the 25th at Croydon ½ in., at Purley 1 in., and Epsom 2 in.; and on the 26th at Croydon 2¾ in., at Purley 3½ in., at Epsom 5 in., and at Betchworth 3 in. Thunderstorms occurred on the 3rd, 4th, and 5th at Epsom, and on the 4th, in College Road, a chimney was struck and a cow killed by lightning. On these days there were thunder and hail generally throughout the district. The month has been unhealthy, scarlet fever and measles being prevalent in parts of the district. Solar haloes were observed at Epsom on the 27th and 28th, and lunar ones there on the 17th and 18th, and at Croydon on the 8th. At Kew there was a grand electrical display of an auroral character about midnight on the 23rd. There were young thrushes flying about at Keston during the first week of the month. The wryneck was seen at Nutfield on the 1st, and house martins at Bromley on the 29th, and swallows at Nutfield on the 27th. The cuckoo was heard at Nutfield on the 18th, at Sanderstead on the 27th, at Bromley and Abinger on the 28th, and at Banstead, Croydon, and Bromley Common on the 29th. At Wallington the almond flowered on the 1st, the plum on the 16th, the damson on the 28th, and the pear and cherry on the 30th; at Banstead the peach on the 16th; and at Kew the plum on the 10th, and the pear on the 28th. At Wallington there was fog on the 8th and 9th, and gloom on the 10th; and at Abinger a yellow fog on the 25th. The rainfall is from about half to three-quarters of an inch above the average. The mean temperature of the month is about 3° below the average, and was at Worcester Park 44°·3, at Wallington and Croydon (Park Hill House) 44°·2, at Epsom 43°·8, and at Warlingham 42°·7. At Croydon (Park Hill House) evaporation was below the average by ·365 in., and percolation was above the average. There were recorded at Wallington 132·5 hours of sunlight, which is 25·1 hours, or six per cent. below the April average of the twenty years 1886–1905.

F. CAMPBELL-BAYARD, F.R.Met.Soc.,
Hon. Sec.

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..
2	..	..	·03	·03	·02	·01	..	..	..	·01	·02	·03	·04	·02	·01	..	..	..	·01	..	..	·02	..	·02	·13	·02
3	·06	·04	·04	·03	·04	·04	·06	·05	·03	·03	·02	·07	·06	·06	·06	·16	·05	·05	·12	·06	·02	·05	·09	·05	..	·03
4	·24	·21	·25	·10	·11	·09	·22	·25	·25	·30	·23	·39	·07	·06	·09	·24	·30	·06	·08	·05	·08	·27	·23	·24	·35	·01
5	·19	·17	·21	·17	·26	·22	·28	·30	·26	·20	·16	..	·20	·33	·45	·22	·21	·20	·27	·18	·17	·21	·28	·20	·22	·44
6	..	..	..	..	..	·01	·01	..	..	·01	·01	..	·01	..	·02	..	..	..	..	..	..	..	..	..	·03	·01
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	·04	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	·07	·05	·04	·02	·03	·02	..	·01	·01	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	·01	..	·01	..	..	·04	·05	·08	·06	·07	·04	·03	·04	..	..
11	..	·01	·01	..	..	..	·01	·01	..	..	..	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	·01
12	..	..	..	..	·01	·01	·01	..	..	..	..	·02	..	..	..	·04	·04	·01	..	..	..	..	..	..	..	..
13	..	..	..	..	..	·01	..	·03	·02	..	·01	·02	..	·02	·01	·02	..	..	..	..	..	..	·04	·03	·02	..
14	..	..	..	..	..	..	·03	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02
19	·04	·07	·08	·12	·12	·04	·04	·02	·02	·02	·02	·15	·04	·15	·19	·04	·05	·07	·10	·10	..	·02	..	·06	..	·07
20	·03	·10	·06	·02	..	..	..	..	..	..	..	·01	..	·01	..	..	..	..	·04	·01	..	..	·03	·01	·08	..
21	..	·05	·01	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..	·01	..	..	..	·01	..	·01
22	..	·01	·04	·04	·03	·02	·03	·04	·04	·03	·03	·02	·07	·03	·04	·02	·03	..	·10	·01	..	..	·01	·06	·02	·02
23	·58	·04	·72	·61	·70	·45	·62	·68	·61	·57	·49	·65	·64	·92	·78	·62	·70	·31	·50	·73	·67	·52	·80	·81	·64	1·07
24	·08	·70	·18	·04	·05	·12	·11	·05	·05	·06	·07	·14	·05	·09	·20	·05	·09	·33	·09	·05	·04	·07	·03	·10	·06	·07
25	·63	·10	·65	·54	·33	·27	·43	·46	·26	·37	·23	·17	·28	·30	·27	·39	·44	·46	·40	·48	·46	·45	·35	·46	·26	·29
26	..	·63	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
27	·26	·23	·23	·20	·22	·16	·16	·16	·15	·14	·18	·16	·16	·16	·15	·11	·44	·12	·12	..	·11	·13	·11	·11	·15	·17
28	·67	·68	·72	·69	·60	·57	·63	·56	·51	·49	·45	·55	·73	·57	·55	·52	·57	·59	·50	·57	·48	·54	·54	·57	·58	·67
29	·25	·26	·25	·18	·19	·18	·27	·16	·16	·16	·10	·12	·17	·15	·15	·14	·17	·19	·18	·17	·05	·15	·15	·14	·14	·08
30	·08	·06	·11	·10	·11	·09	·05	·12	·12	·11	·17	·15	·34	·12	·10	·13	·13	·08	·12	·09	·06	·12	·12	·13	·15	·15
*	3·11	3·40	3·66	2·92	2·84	2·34	2·99	2·91	2·48	2·51	2·20	2·68	2·88	3·00	3·07	2·70	3·26	2·56	2·70	2·58	2·21	2·59	2·81	3·06	2·83	3·14
†	9·88	10·04	10·88	9·70	9·34	8·14	10·15	8·93	8·38	8·38	7·71	9·39	9·39	8·82	9·32	9·04	9·93	8·45	8·48	8·63	6·95	9·25	8·86	9·25	9·42	10·67

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsw'th. Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	·01	..	·02	·01	·01	·01	·02	..	·01	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
3	·02	·03	·04	..	·01	·01	·02	..	·01	..	·05	..	..	..	..	..	..	..	..	·01	..	·03	·03	·04	·03	..
4	·04	·05	·10	·05	·03	·04	·04	..	·02	..	·21	·17	·02	·01	·01	·03	·01	·06	·02	·01	..	..	·03	·03	·02	..
5	·08	·09	·02	·20	·19	·20	·20	·29	·26	·12	·16	·17	·19	·14	·10	·22	·22	·14	·18	·19	·18	·06	·17	·27	·26	·10
6	·02	·01	..	·01	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	·10	·10	·11	·10	·06	·06	..	·04	·04	·04	·01	·02	..	·04	·06	·07	·07	·09	·05	·07	..	·03	·04	·02	·02	·01
10	..	..	..	..	..	..	..	..	..	..	·01	·01	·01	..	·01	·01	..	..	..	..	..	..	..	..	..	..
11	·01	·01	·01	·01	..	·01	·02	..	..	..	·03	·04	..	·02	..	..	·01	·01	..	·01	..	..	..	·01	..	..
12	·01	..	·02	·03	..	·01	..	..	..	..	..	..	..	..	..	..	..	·03	..	·01	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	·08	·10	·06	·06	·08	·10	·10	·07	·17	·04	·07	·13	·09	·09	·04	·09	·09	·10	·07	·13	·04	·06	·08	·16	·13	·11
20	·02	·02	·01	·02	..	·02	·03	·06	·03	·02	..	..	..	·01	·02	·01	·02	·03	..	·01	..	·01	..	..	..	..
21	..	..	..	·01	..	..	..	..	..	..	·01	..	·01	·01	..	..	..	..	..	..	·01	..	·04	·05	·02	·02
22	·03	·03	..	·02	..	·02	..	..	..	·01	..	·04	..	..	..	·01	·03	·02	..	·01	·01	·01	·02	·01	..	..
23	·69	·64	·56	·64	·78	·72	·72	·71	·66	·58	·82	·86	·74	·48	·46	·84	·47	·62	·38	·61	·42	·36	·40	·63	·56	·49
24	·05	·06	·04	·06	·02	·03	·03	·03	·01	·07	·02	·04	·04	..	·01	·07	·07	·05	..	·10	·06	·02	..	·01	..	·02
25	·22	·24	·30	·26	·23	·29	·24	·13	·15	·14	·06	..	·09	·09	·16	·25	·25	·43	·39	·25	·10	·25	·19	·14	·22	·12
26	..	..	..	..	..	..	..	..	..	..	..	·09	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·23	·24	·20	·19	·13	·15	·12	·17	·15	·20	·15	·08	·14	·13	·08	·20	·19	·19	·13	·14	·13	·14	·16	·15	·15	·14
28	·52	·52	·62	·49	·43	·42	·48	·45	·38	·40	·40	·52	·45	·41	·29	·53	·29	·50	·33	·28	·35	·31	·40	·40	·42	·36
29	·19	·17	·17	·16	·09	·15	·10	·15	·13	·20	·08	·12	·12	·10	·05	·15	·21	·21	·11	·11	·10	·04	·12	·12	·10	·15
30	·06	·09	·07	·13	·12	·07	·07	·05	·06	..	·07	·07	·05	·04	·08	·08	·01	·02	·05	·04	·08	·08	·08	·06	·05	·01
*	2·38	2·40	2·35	2·45	2·18	2·31	2·19	2·15	2·08	1·82	2·17	2·36	1·95	1·58	1·37	2·57	1·94	2·50	1·71	1·98	1·48	1·41	1·76	2·10	1·98	1·53
†	8·23	8·10	7·65	7·78	6·92	7·74	7·83	7·16	7·17	6·03	6·36	7·68	7·06	5·60	5·24	5·97	..	7·85	5·91	6·31	4·18	4·53	6·82	7·29	6·79	5·51

* The figures in this row are the totals for the month. † The totals from January 1st.

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leatherhead	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	·42	·40	·34	·54	·23	·26	·38	·24	·25	·30	·17	..	..	..	·09	·20	·12	·21	·16	·26	·44	·28	·24	·25	·16	·02
3	..	·01	·03	·02	·02	·06	·02	·10	·11	·03	·11	·15	..	·04	..	·13	·18	·03	..	·03	·03	·12	·06	·05	·18	·05
4	·11	·14	·17	·09	·13	·03	·06	·02	·02	·01	..	..	·04	·01	..	·02	·05	..	·09	·10	·03	·05	·05	·02	..	..
5	·36	·33	·29	·37	·32	·32	·30	·29	·32	·35	·31	·34	·17	·31	·27	·30	·35	·43	·31	·19	·12	·32	·28	·31	·36	·26
6	·06	·03	·10	·07	·04	·02	·02	·02	·02	..	..	·03	·04	·02	·03	·03	·05	·03	..	·06	·03	·04	·03	·03	·06	·02
7	·04	·03	·04	·06	·06	·04	·05	·04	·04	·04	·04	·09	·04	·06	·06	·05	·07	·02	·07	..	..	·04	·06	·07	·07	·07
8	..	·01	..	..	..	·01	..	..	..	..	..	·01	..	..	..	..	..	·01	..	..	..	..	..	·01	..	..
9	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01
11	·24	·24	·22	·27	·27	·26	·30	·31	·29	·24	·24	·40	·45	·38	·39	·27	·32	·29	·31	·22	·23	·31	·32	·30	·29	·46
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·05	..	..	..	..	..	..
13	·04	·09	·19	·24	·17	·08	·11	·19	·15	·13	·03	·25	·19	·21	·35	·15	·18	·21	·22	·33	·35	·17	·21	·15	·15	·32
14	·61	·66	·59	·59	·35	·35	·32	·21	·24	·19	·20	·39	·28	·30	·31	·24	·32	·34	·40	·37	·27	·36	·28	·26	·25	·29
15	·14	·11	·09	·17	·18	·10	·10	·06	·06	·06	·06	·10	·03	·08	·03	·07	·13	·14	..	·11	·06	·14	·10	·08	·09	·10
16	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·16	·11	·06	·10	·12	·11	·21	·13	·11	·02	·04	·09	·09	·03	·02	·14	·13	·02	..	·04	..	·07	·15	·13	·15	·01
23	..	..	..	..	..	..	..	·01	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..	·03	..
24	·04	·04	·07	·07	·04	..	·04	·03	·03	·01	·03	·06	·03	·02	·02	·04	·03	·04	..	..	..	·05	·04	·06	·02	·04
25	·03	·01	..	·04	·04	..	·02	·01	·01	·01	·01	·01	..	..	..	·01	·05	·05	..	·05	..	·03	·03	·02	·02	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	·59	·54	·49	·36	·37	·59	·46	·53	·53	·59	·58	·54	·77	·55	·67	·43	·39	·35	·49	·32	·32	·38	·49	·50	·52	·58
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	·04	·07	·09	·09	·11	·04	·05	·04	·04	·03	·03	·11	·12	·12	·05	·06	·04	·07	·10	·09	·11	·04	·10	·15	·15	..
*	2·88	2·82	2·77	3·08	2·45	2·28	2·45	2·23	2·22	2·01	1·86	2·57	2·25	2·13	2·29	2·14	2·41	2·24	2·15	2·22	1·99	2·40	2·45	2·39	2·50	2·23
†	12·76	12·86	13·65	12·78	11·79	10·42	12·60	11·16	10·60	10·39	9·57	11·96	11·64	10·95	11·61	11·18	12·34	10·69	10·63	10·85	8·94	11·65	11·31	11·64	11·92	12·90

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (Place Fell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump. St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (Park H.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		·06	·23	·41	..	..	·22	·20	·18	·08	·06	·37	·31	·15	·36	·03	·32	·45	·29	·32	·39	·31	·27	·40
3	·07	·06		·08	·13	..	·21	·24	·04	·05	·13	·22	·36	·11	·08	·30	·03	·30	·12	·17	·30	·16	·08	·17	·15	·14
4	..	..		·03	·03	·09	·02	·06	·03	·04	·03	·02	·03	..	·02	·05	·03	·03	·02	·02	·02	·02	·02	·01	·03	·03
5	·33	·30		·33	·05	·29	·31	·24	·35	·21	·20	·23	·26	·27	·14	·10	·15	·10	·22	·21	·15	·16	·15	·15	·15	·22
6	·02	·02		·03	·02	·01	·03	·07	·02	·03	·03	·02	·02	..	·08	·05	·07	·06	·06	·06	·08	·05	·06	·04	·04	·06
7	·07	·05		·08	·05	·05	·05	·05	·06	·06	·04	·04	·05	..	·04	·01	·05	..	·04	·04	·04	·04	·04	·04	·05	..
8	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..		..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·08	..	..
11	·43	·41		·29	·31	·34	·32	·31	·33	·26	·34	·32	·34	·41	·29	·28	·28	·31	·34	·39	·35	·36	·33	·30	·33	·34
12	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..
13	·30	·27		·18	·16	·20	·16	·21	·22	·83	·22	·23	·29	·32	·34	·20	·28	·29	·35	·32	·36	·28	·28	·31	·29	·33
14	·27	·27		·28	·24	·28	·45	·41	·40	·34	·25	·23	·23	·24	·20	·21	·22	·19	·21	·16	·13	·16	·15	·14	·17	·19
15	·13	·11		·08	·10	·12	·22	·19	·12	·10	·08	·09	·12	·11	·09	·05	·08	·05	·10	·09	·07	·06	·06	·06	·06	·09
16	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..		..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..		..	..	..	·03	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·03	·02		·13	·05	·01	·03	·03	·04	·04	..	..	·01	..	·02	..	·03	..	·02	·01	·02	·01	·01	·01	·03	·03
23	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·02	·01		·06	·04	·03	·03	..	·03	·03	·04	·03	·05	·04	..	·02	·02	..	·03	·02	·02	·02	·02	·02	·03	..
25	..	..		·03	·02	..	..	·04	·05	·05	·02	·01	·02	..	·02	·03	·01	·03	·02	·01	·01	·01	..	..	·01	·01
26	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..		..	..	..	..	·03	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	·11	·09		·52	·44	·37	·32	·32	·34	·30	·37	·37	·46	·41	·31	·34	·32	·30	·35	·35	·32	·33	·37	·34	·35	·37
30	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..
31	·14	·12		·07	·12	·13	·03	..	·03	·05	·06	·05	·09	·10	·02	·07	·06	·16	·12	·11	·08	·06	·05	·05	·05	·07
*	1·92	1·73	1·49	2·25	2·00	2·33	2·22	2·20	2·28	2·60	1·99	1·94	2·39	2·38	1·96	1·86	1·99	1·85	2·33	2·41	2·25	2·04	2·01	2·03	2·01	2·28
†	11·10	9·85	10·19	12·33	10·13	11·24	10·55	10·61	11·59	12·82	9·89	9·71	11·15	11·89	9·48	9·74	9·74	9·30	10·63	10·49	8·40	10·28	9·14	9·36	10·33	10·74

MONTHLY GAUGE.

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump.St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (TheDowns	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	·30	·24	·12	..	..	..	·04	..	..	·02	..	·17	·22	·15	·40	·19	·13	·14	·13	·13	·54	·40	·31	·35	..	·16
3	·17	·13	·08	·19	·14	·08	·06	..	·15	·10	·08	·15	·10	·18	·03	·09	·07	·06	·02	·04	·01	..	·02	..	·27	..
4	·03	·03	·03	·02	..	·02	·01	..	·01	·02	·02	·03	·01	·02	·02	·01	·01	..	·01	·01	·03	·03	·02	·03	..	·01
5	·19	·19	·22	·22	·16	·25	·21	·07	·10	·10	·11	·12	·11	·15	·04	·09	·12	·09	·09	·11	·01	·13	·09	·11	·11	·11
6	·04	·04	·02	..	..	·05	·02	·02	·03	·05	·04	·07	·03	·05	·11	·05	·05	·02	·01	..	·02	·05	·03	·03	·03	·04
7	·05	·05	·04	·06	·08	..	·03	·03	·05	·06	·05	·06	·06	·07	·05	·06	·07	·06	·05	·06	·04	·04	·05	·06	·06	·08
8	·01	·01	..	..	..	·04	·01	..	..	·01	..	..	..	·01	..	..	..	..	..	..	..	..	·01	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	·01
11	·34	·31	·30	·39	·40	·42	·42	·48	·39	·34	·38	·47	·33	·36	·30	·25	·26	·23	·21	·24	·17	·20	·17	·20	·19	·20
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..
13	·29	·22	·21	·27	·30	·20	·13	·11	·15	·21	·14	·33	·11	·21	·25	·06	·14	·15	·14	·19	·14	·11	·13	·13	·15	·15
14	·21	·20	·24	·21	·20	·20	·21	·10	·11	·11	·10	·14	·08	·12	·19	·10	·17	·14	·14	·17	·10	·19	·14	·15	·16	·17
15	·09	·08	·06	·05	·08	·09	·08	·03	·03	·04	·06	·06	·04	·06	·08	·09	·08	·07	·04	·06	·07	·08	·06	·07	·06	·08
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	·03	·02	·05	·03	·07	·04	·02	·04	·04	·01	·07	·01	·05	·03	·03	·04	·06	·05	·05	·04	·04	·05	·05	·03	·05	·01
23	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
24	·04	·05	·04	·03	·04	·03	·03	·02	·03	·02	·04	·02	·02	·02	·02	·01	..	·01	..	·02	·01	·02	·01	·02	·02	·01
25	·02	·02	·02	·02	..	..	..	..	..	..	..	·04	..	·03	·01	..	..	..	..	·01	·01	..	·02	·01	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	·36	·37	·41	·47	·45	·47	·43	·56	·37	·40	·37	·37	·32	·33	·28	·31	·30	·31	·31	·26	·25	·32	·29	·36	·31	·40
30	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	·07	·05	·07	·12	·12	·10	·10	..	·10	·09	·07	·10	·07	·06	·11	·10	·09	·07	·02	·02	..	·09	·05	·05	·06	·03
*	2·25	2·01	1·91	2·08	2·04	1·99	1·80	1·46	1·56	1·58	1·53	2·14	1·55	1·86	1·92	1·45	1·55	1·40	1·22	1·36	1·44	1·73	1·47	1·60	1·47	1·46
†	11·20	10·18	10·58	10·80	10·49	11·07	10·12	8·00	8·63	9·41	8·16	10·51	8·81	9·96	9·68	8·09	9·93	8·64	7·92	8·97	8·16	9·51	9·19	10·16	9·68	8·40

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandswth. Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilming-ton	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	·07	·09	·14	·09	..	·36	·02	..	·19	·22	..	..	..	·21	·09	·08	·47	·38	·21	·11	·07	..	·34	·03	·05	·31
3	·04	·02	·04	·24	·43	·10	·34	·32	·10	·03	·01	·01	·18	·10	·12	·33	..	·05	·05	·36	·07	·40	·12	·07	·08	..
4	·02	..	·02	·01	..	..	·01	..	..	·02	..	..	..	·01	..	..	·05	·04	..	..	·01	·04	·02	·01	..	·02
5	·10	·14	·09	·07	·11	·13	·12	·13	·12	·01	·09	·10	·07	·08	·07	·14	·08	·09	·09	·08	·11	·06	·12	·12	·08	·04
6	..	·02	·03	·04	·04	·06	·05	·06	·07	..	·01	·02	·06	·04	·02	·04	·04	·04	..	..	·01	·01	·05	·03	·02	..
7	·09	·10	·07	·10	·06	·08	·07	..	·08	·05	·03	·04	·03	·05	·08	·09	·08	09	·06	·07	·02	·04	·08	·06	·04	·04
8	..	..	·01	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·02	·02	·02	·01	..	..	..	..	..	..	..	..	..	..	..	·02	..	·04	·03	..	·02	..	..	·01	..	·03
11	·21	·20	·20	·27	·30	·38	·36	·43	·37	·37	·45	·52	·31	·35	·26	·42	·32	·28	·21	·29	·21	·25	·38	·36	·33	·32
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·07	·06	·06	·02	·10	·09	·09	·10	·04	..	·19	·07	·04	·01	..	·06	·07	·04	..	..	..	..	..	·01	..	..
14	·18	·20	·16	·11	·08	·10	·10	·10	·08	·06	·08	·11	·08	·07	·03	·11	·18	·24	·16	·12	·03	·06	·10	·07	·06	·14
15	·08	·09	·07	·12	·10	·09	·07	·08	·10	·07	·02	·02	·01	·10	·09	·13	·04	·07	·04	·12	·06	·10	·15	·08	·10	·03
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..
22	·03	·01	..	·04	·04	·06	·04	·04	·04	..	..	..	·02	·02	·03	·06	·06	·02	..	·03	..	·02	·04	·04	·01	·02
23	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·02	·01	·04	·03	..	·02	·03	·02	·02	..	·02	·02	·02	·01	..	·02	·02	..	..	..	..	..	·02	·01	..	..
25	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	·35	·34	·42	·46	·36	·37	·36	·38	·38	·29	·41	·57	·50	·46	·56	·50	·43	·52	·40	·55	..	·24	·54	·63	·56	·52
30	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	·06	·05	·14	·10	·06	·06	·08	·07	·09	·05	·03	·07	·09	·08	·07	·06	·06	·08	·03	·06	..	·04	·10	·07	·07	·06
*	1·34	1·35	1·51	1·72	1·68	1·90	1·76	1·73	1·70	1·17	1·34	1·55	1·41	1·59	1·42	2·06	1·90	2·00	1·28	1·79	·61	1·27	2·06	1·60	1·40	1·53
†	9·57	9·45	9·16	9·50	8·60	9·64	9·59	8·89	8·87	7·20	7·70	9·23	8·47	7·19	6·66	10·03	9·05	9·85	7·19	8·10	4·79	5·80	8·88	8·89	8·19	7·04

* The figures in this row give the totals for the month. † The totals from January 1st.

NOTES.

MAY, 1908.

The month has been exceedingly warm—in fact, there is only one May in which the mean temperature exceeded that of the present month (*viz.* May, 1889, when the mean temperature was 57°·2) during the last thirty-two years. It has also been somewhat wet, the rainfall being about one-fourth of an inch above the average. The warmth occasioned a very rapid gain in the date of the flowering of plants. As compared with Mr. Mawley's phenological data for England S., Mr. J. E. Clark, of Purley, reports as follows:—The blackthorn flowered on April 27th, and was twenty-one days late; the hedge mustard on May 7th, eighteen days late; the horse chestnut on May 14th, eight days late; the hawthorn on May 23rd, eleven days late; and the ox-eye daisy on May 25th, four days late. The flowering dates at Epsom were:—Pear on the 2nd, apple on the 9th, laurel on the 9th, white lilac on the 14th, purple lilac on the 17th, horse chestnut on the 18th, laburnum on the 21st, pink may on the 23rd, and white may on the 25th. Whilst at Wallington they were:—Apple on the 5th, white lilac and white chestnut on the 15th, purple lilac on the 16th, white may on the 20th, quince on the 21st, and pink may, red may, and pink chestnut on the 22nd. At Epsom the small blue and the cabbage white butterflies were seen on the 2nd; whilst at Wallington the small blue was observed on the 11th, the small white on the 16th, and the large white on the 27th, and swifts were seen on the 4th, and swallows on the 10th. Thunderstorms, with hail, occurred at most places in the district on the 13th and 22nd, and lightning was seen and thunder heard on several other days. The observer at Nutfield says that there are no gooseberries or plums, owing to the Easter frosts, and that the apples are terribly afflicted with maggot. At Bromley the shade maximum was 70° or above on twelve days, and the shade minimum 50° or above on ten days. Solar haloes were seen at Epsom on the 9th, 10th, 11th, 16th, and 31st; and a lunar one on the 12th, and also at Benhilton on the 13th; and at Epsom a bright prismatic sun-bow was observed between 6.10 and 6.30 p.m. on the 9th. The month has been rather an unhealthy one. The mean temperature of the month is about 3°·2 above the average, and was at Worcester Park 56°·6, at Croydon (Park Hill House) 56°·4, at Epsom and Wallington 56°·3, and at Warlingham 54°·5. There were recorded at Wallington 195·9 hours of sunlight, which is 3 hours, or two per cent., below the May average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

NOTES.

JUNE, 1908.

The month has been one with an average mean temperature and rainfall. There was a series of thunderstorms during the first part of the month, *viz.* on the 1st, 3rd, and 4th, the most remarkable of which was that on the 4th. On this day, besides damage caused by lightning at Abinger and Redhill, there was a somewhat violent hailstorm, the stones in which were a quarter of an inch in diameter at Wallington, whilst at Epsom "many of the stones were equal in size to a blackbird's egg, and there were also several pieces of ice with a snow coating," and at Chislehurst "they were as large as walnuts, and cut the young vegetables and lettuce up in ribbons and perforated the rhubarb and broke three hundred panes of garden glass"; the stones were also large at Keston and Sevenoaks. With reference to the rate at which rain fell in these storms: at Epsom, on the 1st, 0·70 in. fell in twenty minutes, and on the 4th 0·90 in. in forty-five minutes, and 0·31 in. in ten minutes; and on the same date at Beckenham one inch fell in three-quarters of an hour, and at Croydon (Woburn Road) 1·10 in. fell between 6.10 and 7 p.m. There would appear to have been a ground frost on the 21st, an unusual occurrence in June. The observer at West Wickham writes: "In this neighbourhood I have never seen the maggots so bad as this year. They have attacked onions, parsnips, celery, and other plants, celery the worst of all." The hay crop is very heavy, and is well garnered, and the wheat promises well, and at Croydon there is very little aphis. Solar haloes were seen at Greenwich on the 8th, 13th, 16th, 22nd, and 30th, at Epsom on the 3rd, 8th, and 13th, and at Betchworth on the 30th; whilst lunar haloes were seen at Greenwich on the 8th, 11th, and 12th, and at Epsom and Benhilton on the 8th and 11th. The Aurora Borealis was seen at Kenley, Hedley, Epsom, Croydon, and Greenwich on the 30th, and at Wallington on that day there was darkness between 7 and 7.30 p.m. The month, on the whole, has been a healthy one, though cases of diphtheria and scarlet fever have been somewhat numerous in places. The mean temperature of the month is about the average, and was at Croydon (Park Hill House) 60°·3, at Epsom and Worcester Park 60°·1, at Wallington 59°·5, and at Warlingham 58°·3. At Croydon (Park Hill House) evaporation was ·558 in. above the average, and percolation was under the average. There were recorded at Wallington 256·2 hours of sunlight, which is 54 hours, or eleven per cent., above the June average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·86	·76	·78	·77	·87	·74	·54	·53	·51	·49	·42	·75	·62	·74	·76	·56	·66	·63	·50	·93	·72	·63	·56	·63	·65	·71
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	·10	·27	·50	·14	·08	..	..	..	..	..	..	..	..	..	..	..	..	·04	..	·40	·74	..	..	..	..	..
4	·56	·70	·46	·37	·74	·75	·72	·64	·63	·57	·52	·65	1·26	·65	·38	·63	·57	·59	·70	·43	·44	·31	·44	·38	·60	1·05
5	..	..	..	..	..	..	·01	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
6	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·09	·06	·10	·11	·07	·08	·06	·06	·06	·06	·07	·02	·02	·02	·03	·04	·05	·05	·08	·06	·05	·04	·07	·03	·02	..
8	..	·02	..	..	..	..	·02	·10	·10	..	..	..	·04	..	..	..	..	..	..	..	..	..	..	·01	..	·06
9	..	·04	·08	·10	·20	·17	·12	..	..	·12	·13	·10	·15	·10	·07	·12	·14	..	·10	·15	·13	·12	..	·11	·09	·11
10	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	·01	..	·02	..	·01	·01	·01	·01	..	·02	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
13	..	·01	..	..	·01	..	..	·01	·01	·01	..	..	..	·01	..	..	·02	..	..	..	..	..	·04	·04	..	·02
14	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..
15	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·46	·42	·47	·52	·55	·53	·52	·52	·52	·47	·42	·55	·51	·49	·53	·49	·51	·46	·49	·48	·50	·49	·51	·54	·55	·55
17	..	..	·01	·02	..	..	·01	..	..	..	·05	..	..	..	..	..	..	·02	..	·01	·04	..	..	·01	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	2·07	2·29	2·40	2·05	2·52	2·28	2·02	1·88	1·85	1·72	1·65	2·08	2·60	2·01	1·77	1·84	1·95	1·79	1·87	2·46	2·62	1·60	1·62	1·76	1·93	2·50
†	14·83	15·15	16·05	14·83	14·31	12·70	14·62	13·04	12·45	12·11	11·22	14·04	14·24	12·96	13·38	13·02	14·29	12·48	12·50	13·31	11·56	13·25	12·93	13·40	13·85	15·40

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (Place Fell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump. St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (Park H.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·75	·74		·80	·66	·56	·71	·66	·66	·73	·56	·55	·64	·64	·73	·64	·69	·70	·67	·58	·57	·54	·68	·67	·63	·61
2	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	·08	·06		..	..	..	·05	..	·07	·05	..	..	..	..	..	·03	·06	..	..	..	..	..	..	..	..	..
4	1·13	1·07		·32	·50	·43	·63	·58	·63	1·21	·43	·48	·55	·48	·91	·65	·75	·72	·92	·83	1·05	·86	1·21	1·28	1·24	·81
5	..	..		..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·02	·01	..	..	·01	..	·01	·02
6	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..		·02	·01	·01	..	·04	·04	·05	·01	..	·01	..	·02	..	·02	·02	·02	·01	·01	·02	·01	·01	·01	·02
8	..	..		..	..	..	·04	·02	..	·03	·01	..	..	..	..	..	·02	..	..	·01	·01	..	..	..	·02	·01
9	·09	·07		·10	·07	·08	·07	·06	·19	·12	·09	·07	·11	·08	·04	·08	·06	·07	·10	·05	·03	·05	·05	·05	·05	·05
10	..	..		..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..		·03	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·55	·52		·52	·51	·53	·51	·45	·54	·52	·49	·50	·53	·50	·50	·49	·51	·47	·52	·51	·48	·52	·51	·50	·52	·54
17	·03	·02		..	..	..	·04	·08	·02	·03	·01	·01	·03	..	·01	·03	·01	·05	..	..	·01	..	..	..	..	..
18	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..		..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	2·63	2·48	3·05	1·79	1·75	1·62	2·05	1·89	2·17	2·74	1·61	1·61	1·87	1·70	2·21	1·92	2·12	2·03	2·25	2·00	2·16	1·99	2·47	2·51	2·48	2·06
†	13·73	12·33	13·24	14·12	11·88	12·86	12·60	12·50	13·76	15·56	11·50	11·32	13·02	13·59	11·69	11·66	11·86	11·33	12·88	12·49	10·56	12·27	11·61	11·87	12·81	12·80

MONTHLY GAUGE.

* The figures in this row give the totals for the month. † The totals from January 1st.

* The figures in this row give the totals for the month. † The totals from January 1st.

Daily Rainfall. Greenwich average 25 years (

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump. St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew. Wks.)	Wimbledon (The Downs	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew. Wks.)	Kingston (County H.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·59	·67	·70	·82	·68	·68	·52	·31	·69	·65	·61	·84	·75	·75	·72	·60	·60	·61	·56	·65	·87	·71	·75	·83	·80	·60
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·03	·04	·04	·61	·15	·72	·28	·65	·61	·57	·34
4	·78	1·11	·73	·76	·85	·82	1·13	·36	1·03	·76	·92	1·20	1·44	1·41	1·12	·26	1·05	·81	1·13	·67	·52	·49	·67	1·20	·82	·13
5	·02	..	..	..	..	..	..	·03	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·02	·02	·02	·01	..	..	..	·03	..	..	..	·02	..	·03	·01	·01	·02	·01	..	..	..	·02	..	·01	..	·01
8	·02	·01	·01	..	..	..	·01	..	·01	..	·02	·01	·02	·01	..	..	..	..	·01	·01	·02	·01	·02	·01	..	..
9	·08	·09	·10	·04	..	·10	·02	·02	..	·03	..	..	..	·02	·05	·02	·04	·08	·07	·06	·07	·04	·09	·07	·06	·06
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·53	·52	·52	·57	·60	·53	·47	·58	·50	·51	·55	·54	·50	·53	·53	·47	·46	·45	·45	·48	·46	·47	·45	·50	·40	·63
17	..	·01	..	·01	..	·05	·01	..	..	·03	·02	·02	..	·02	..	..	·01	..	·02	..	·03	·01	·02	·01	·10	·03
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	2·04	2·43	2·08	2·21	2·13	2·18	2·16	1·34	2·23	1·98	2·12	2·63	2·71	2·77	2·44	1·40	2·22	2·00	2·85	2·02	2·69	2·03	2·65	3·24	2·75	1·81
†	13·24	12·61	12·66	13·01	12·62	13·25	12·28	9·34	10·86	11·39	10·28	13·14	11·52	12·73	12·12	9·49	12·15	10·64	10·77	10·99	10·85	11·54	11·84	13·40	12·43	10·21

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsworth Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Camberwell (TheGreen)	Camberwell (Town Ha.)	Camberwell (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·78	·78	·71	·78	·68	·78	·88	·59	·75	·60	·36	·47	·52	·59	·74	·99	·85	·91	·82	·51	·35	·57	·55	·46	·48	·89
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..
3	·29	·28	·19	·06	..	..	..	..	..	..	..	..	..	..	..	..	..	·15	..	..	..	..	..	..	..	..
4	·34	·32	·39	·42	1·13	1·29	1·38	·80	·87	·67	·28	·17	·85	·78	·55	1·52	1·17	·18	·17	·59	·41	·56	1·22	·96	1·24	1 26
5	..	..	..	..	·02	·01	..	..	..	..	·02	..	..	..	..	..	·01	·02	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·02	·01	·03	·01	·01	·02	·04	..	·01	..	..	..	..	·01	..	·02	..	·02	·01	..	..	..	..	..	·02	..
8	..	..	..	·02	..	..	..	..	·02	·01	..	..	·01	·02	·02	·01	·04	..	..	·03	·01	·04	·04	·02	..	·03
9	..	..	..	·01	·02	·02	·01	..	·02	..	..	..	·01	..	..	·01	..	·02	..	..	..	..	·02	·01	..	..
10	..	..	·03	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·53	·52	·55	·56	·41	·50	·50	·51	·52	·61	·54	·67	·50	·50	·52	·61	·55	·58	·47	·49	·28	·45	·52	·54	·49	·44
17	·03	·03	·03	·06	·09	·01	·01	..	·01	..	..	..	·02	..	..	·01	..	·02	..	..	·01	·03	·03	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1·99	1·94	1·93	1·92	2·36	2·63	2·82	1·90	2·20	1·89	1·20	1·31	1·91	1·90	1·83	3·17	2·62	1·92	1·47	1·62	1·06	1·65	2·38	1·99	2·23	2·62
†	11·56	11·39	11·09	11·42	10·96	12·27	12·41	10·79	11·07	9·09	8·90	10·54	10·38	9·09	8·49	13·20	11·67	11·77	8·66	9·72	5·85	7·45	11 26	10·88	10·42	9·66

* The f[illegible] this year in the totals for the month. † The totals from January 1st [illegible]

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	·08	·09	·04	·04	..	..	..	..	..	..	..	..	..	..	·09
4	..	..	..	·02	·05	·05	·08	·07	·07	·05	·03	·04	·06	·01	·03	·06	·10	·14	·24	·08	·25	·06	·06	·06	·06	·04
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·02	·04	·03	·03	·01	·02	·01	·01	·01	·02	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	·22	·19	·21	·20	·18	·17	·20	·19	·19	·16	·14	·19	·09	·17	·16	·17	·15	·17	·16	·11	·13	·14	·18	·20	·25	·24
9	·30	·23	·30	·20	·21	·15	·22	·19	·19	·15	·14	·33	·23	·30	·28	·27	·32	·28	·27	·21	·22	·39	·29	·28	·32	·29
10	·20	·18	·20	·18	·18	·15	·18	·14	·13	·10	·08	·17	·08	·14	·12	·13	·21	·20	·17	·07	·08	·18	·17	·16	·19	·14
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	·31	·22	·20	·30	·29	·36	·66	·52	·52	·67	·44	·97	1·49	·96	·95	·70	·65	·36	·35	·24	·30	·58	·84	·72	·55	1·27
13	·21	·19	·23	·30	·47	·63	·32	·52	·52	·45	·62	·27	·19	·25	·22	·35	·39	·74	·73	·46	·38	·39	·26	·35	·54	·32
14	·11	·16	·20	·17	·35	·03	·06	·08	·09	·08	·07	·06	·08	·05	·15	..	·29	·48	·32	·14	·13	·60	·26	·16	·15	·09
15	·14	·14	·17	·12	·10	·14	·15	·14	·14	·12	·10	·22	·14	·17	·11	·26	·18	·48	·80	·21	·10	·32	·19	·20	·18	·17
16	·76	·69	·70	·78	·68	·74	·96	·74	·68	·67	·71	1·13	·80	·97	·95	·84	·86	·55	·62	·57	·65	·70	·84	·92	1·01	·87
17	·56	·51	·57	·46	·50	·46	·53	·54	·55	·55	·74	·60	·30	·52	·64	·51	·54	·42	·41	·31	·26	·51	·60	·59	·65	·64
18	·04	..	·06	·12	·18	·12	·05	·09	·07	·09	·08	·05	·04	·04	·05	·07	·09	·06	..	·05	·03	·05	..	·08	·12	·02
19	..	..	..	·02	·01	·01	..	..	..	..	·01	..	·02	..	..	..	..	·01	..	..	..	..	..	·01	..	..
20	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	·01	·13	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	2·87	2·55	2·87	2·90	3·22	3·04	3·42	3·23	3·16	3·11	3·18	4·11	3·61	3·62	3·70	3·36	3·78	3·90	4·20	2·45	2·53	3·92	3·69	3·73	4·02	4·18
†	17·70	17·70	18·92	17·73	17·53	15·74	18·04	16·27	15·61	15·22	14·40	18·15	17·85	16·58	17·08	16·38	18·07	16·38	16·70	15·76	14·09	17·17	16·62	17·13	17·87	19·58

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (Place Fell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn. N. rd.)	Croydon (Wob. rd.)	Croydon (Park H. R.)	Croydon (Pk. H. Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	·11	·09		·04	·01	..	..	..	..	·01	·03	·03	..	..	..	..	..	..	..	·04	·11	·12	·15	·13	·16	·12
4	·09	·07		·04	·05	·04	·04	·06	·08	·09	·04	·04	·04	·04	·05	·04	·05	·04	·04	·05	·07	·06	·12	·11	·09	·07
5	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..
8	·16	·13		·22	·13	·13	·11	·12	·13	·11	·12	·13	·14	·14	·09	·12	·12	..	·11	·11	·09	·10	·10	·10	·12	..
9	·30	·27		·30	·23	·25	·27	·27	·28	·23	·22	·22	·25	·23	·22	·24	·23	·29	·24	·24	·23	·23	·23	·22	·24	·37
10	·23	·21		·17	·10	·11	·12	·11	·10	·07	·08	·08	·10	·10	·05	·06	·06	·06	·07	·07	·05	·06	·05	·07	·07	·08
11	..	..		..	..	..	..	..	..	..	..	..	..	..	..	·04	..	..	..	..	..	..	..	..	..	..	..
12	1·23	1·19		·72	·90	·90	·94	·45	·81	·58	·84	·72	·70	·88	·82	·75	·85	·82	1·01	1·11	1·06	1·00	1·01	·92	1·15	·99
13	·38	·36		·31	·22	·22	·41	·85	·44	·50	·21	·36	·57	·25	·25	·18	·23	·24	·24	·17	·17	·20	·23	·22	·19	·23
14	·05	·05		·31	·42	·23	·19	·20	·23	·11	·13	·11	·15	·12	·17	·12	·19	·21	·22	·16	·25	·09	·11	·02	·04	·06
15	·18	·17		·25	·21	·20	·34	·32	·46	·17	·12	·13	·18	·16	·06	·07	·08	·08	·08	·09	·07	·18	·07	·10	·12	·15
16	1·05	1·02		·82	·70	·73	·67	·65	·67	·68	·60	·70	·72	·68	·62	·65	·69	·68	·65	·63	·65	·60	·63	·62	·63	·65
17	·46	·44		·66	·53	·50	·37	·38	·35	·27	·50	·46	·53	·48	·41	·40	·50	·45	·46	·46	·46	·57	·49	·57	·62	·58
18	·03	·02		·06	·08	·04	·07	·07	·07	·07	·05	·07	·03	·05	·08	·07	·01	·02	·02	·03	·02	·03	·02	·03	·02	·03
19	..	..		..	..	..	·01	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..		..	..	..	·01	·02	·01	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..
21	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	4·27	4·02	3·71	3·90	3·58	3·35	3·55	3·50	3·65	2·89	2·94	3·05	3·41	3·13	2·82	2·74	3·02	2·90	3·14	3·23	3·24	3·24	3·21	3·11	3·45	3·33
†	18·00	16·35	16·95	18·02	15·46	16·21	16·15	16·00	17·41	18·45	14·44	14·37	16·43	16·72	14·51	14·40	14·88	14·23	16·02	15·72	13·80	15·51	14·82	14·98	16·26	16·13

MONTHLY GAUGE.

* the totals for the month

† The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump.St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (The Downs	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	·05	·15	·12	·11	·21	·12	·22	·11	·27	·26	·18	·38	·35	·21	·03	·09	..	..	..	..	..	..	..	..	..	..
4	·05	·10	·09	·05	·11	·11	·03	·30	·03	·03	·05	·20	·21	·07	·07	·10	·04	·06	·06	·08	·17	·11	·08	·07	·08	·11
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	·01	..	..	..	..	..	·01	..	..	..	..	..	·01	..	·02	..	..	..	..	..	..	..	·01	..	·01
8	·17	·13	·13	·13	·13	·15	·09	·07	·10	·09	·11	·12	·07	·10	·10	..	·10	·09	·09	·08	·13	·13	·09	·11	·12	·10
9	·25	·24	·26	·32	·26	·28	·25	·19	·21	·23	·22	·26	·24	·26	·24	·26	·27	·25	·24	·22	·24	·24	·23	·27	·26	·26
10	·09	·07	·10	·08	·08	·10	·05	·02	·04	·05	·06	·06	·04	·06	·05	·05	·07	·05	·03	·04	·06	·04	·05	·05	·06	·03
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..
12	·93	·88	·76	1·02	1·05	1·14	1·71	1·12	1·80	1·41	1·13	1·07	·92	·95	·96	·68	·83	·79	·79	·68	·40	·15	·42	·53	·23	·43
13	·22	·26	·26	·26	·25	·31	·21	·10	·19	·22	·27	·24	·20	·22	·24	..	·19	·18	·19	·17	·22	·23	·17	·18	·43	·17
14	·06	·08	·42	·35	·14	·43	·27	·06	·06	..	·11	·15	·14	·22	·18	·21	·22	·25	·26	·09	·36	·33	·26	·23	·28	·09
15	·15	·12	·30	·15	·15	·14	·13	·12	·16	·19	·21	·13	·09	·10	·07	·14	·11	·11	·15	·07	·04	·05	·06	·24	·19	·09
16	·71	·71	·70	·74	·73	·56	·60	·52	·65	·67	·67	·73	·65	·67	·65	·60	·65	·63	·61	·68	·62	·58	·62	·66	·68	·62
17	·58	·52	·50	·54	·58	·60	·48	·37	·40	·46	·61	·36	·30	·45	·41	·33	·45	·41	·36	·46	·39	·34	·49	·33	·32	·26
18	·03	·04	·06	·05	·06	·05	·02	·01	·02	·04	·04	·06	·04	·04	..	·02	·09	·06	..	·09	·21	·09	·04	·04	·06	·04
19	·01	·01	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..
20	..	·01	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	3·30	3·33	3·70	3·80	3·75	3·99	4·06	3·03	3·93	3·65	3·66	3·76	3·25	3·36	3·00	2·50	3·02	2·88	2·78	2·66	2·84	2·31	2·52	2·72	2·71	2·21
†	16·54	15·94	16·36	16·81	16·37	17·24	16·34	12·37	14·79	15·04	13·94	16·90	14·77	16·09	15·12	11·99	15·17	13·52	13·55	13·65	13·69	13·85	14·36	16·12	15·14	12·42

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsworth Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	·06	·05	·19	·22	·18	·37	·41	·25	·35	·32	·08	·07	·22	·31	·33	·51	·29	·19	·19	·25	·03	·42	·23	·23	·28	·42
4	·14	·14	·13	·10	·09	·13	·15	·07	·05	·05	·49	·60	·80	·10	·09	·07	·09	·16	·09	·11	·07	·13	·28	·32	·37	·22
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·02	·01	·02	·02	·01	·02	..	..	·01	·01	·01	..	..	·01	..	·01	·02	·02	..	..	..	..	..	·01	..	..
8	·17	·18	·08	·10	·08	·11	·10	·10	·10	·11	·07	·10	·08	·06	·06	·08	..	·11	·08	·08	..	·07	·08	·12	·08	·06
9	·30	·30	·26	·22	·25	·17	·25	·24	·23	·24	·18	·18	·17	·18	·21	·27	·34	·26	·22	·18	..	·20	·21	·18	·16	·18
10	·04	·04	·06	·08	·03	·03	·06	·04	·05	·04	·01	·03	·04	·03	·04	·06	·06	·06	·05	·07	..	·05	·06	·04	·02	·04
11	·02	·02	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
12	·48	·46	·79	·85	·62	·69	1·03	1·22	1·23	1·05	1·32	1·50	1·40	·81	·84	1·07	1·23	1·10	·88	·68	·63	·97	·93	1·04	1·03	·99
13	·23	·22	·21	·31	·48	·21	·23	·23	·25	·26	·12	·13	·21	·22	·23	·30	·04	·20	·25	·23	·14	·15	·24	·18	·20	·10
14	·05	·05	·15	·20	·44	·31	·16	·13	·13	·19	·12	·05	·02	·19	·12	·25	·20	·11	·08	·14	·07	·04	·13	·07	·10	·03
15	·11	·11	·07	·08	·10	·15	·17	·23	·12	·09	·12	·13	·07	·07	·07	·08	·14	·13	·10	·13	·02	·11	·11	·11	·08	·10
16	·72	·75	·68	·68	·62	·71	·73	·71	·72	·70	·57	·60	·67	·59	·56	·83	·88	·75	·73	·61	·56	·60	·63	·63	·58	·52
17	·23	·25	·37	·38	·46	·52	·40	·47	·52	·59	·24	·47	·35	·43	·40	·63	·40	·38	·44	·49	·42	·32	·47	·60	·56	·22
18	·09	·09	·05	·06	·03	·04	·05	·06	·05	·05	·02	..	..	·05	·04	·02	·02	·02	·01	·03	·04	·04	·05	·14	·09	·02
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..
20	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	2·67	2·67	3·06	3·31	3·39	3·46	3·74	3·75	3·82	3·71	3·35	3·86	4·03	3·05	3·00	4·18	3·72	3·49	3·12	3·01	1·98	3·10	3·42	3·67	3·55	2·90
†	14·23	14·06	14·15	14·73	14·35	15·73	16·15	14·54	14·89	12·80	12·25	14·40	14·41	12·14	11·49	17·38	15·39	15·26	11·78	12·73	7·83	10·55	14·68	14·55	13·97	12·56

* The figures in this row give the totals for the month. † The totals from January 1st.

NOTES.

JULY, 1908.

The month in its distribution of rainfall is very similar to June. The first two days were dry, then from the 3rd to the 19th there was a spell of wet days with heavy rains, particularly on the 12th and 16th, and then from the 20th to the end of the month it was very bright and dry with high haze or mist. The rains were of great benefit to the fruit crops, but unfortunately a good deal of hay was spoilt by them in the Abinger district. No wasps have been seen, and but few butterflies, and there is but little aphis. At Abinger a night hawk's nest has been found with young hatched out. Vivid after-glows were seen on the 1st and 2nd, and on the 27th Capt. Carpenter mentions a very beautiful sunset with a mackerel sky, the lines of which were from north and south, but moving from the south-west with fine streamers trending east and west. The dews were very heavy during the latter part of the month. Thunder and lightning occurred on the 3rd and 4th throughout the district, and thunder was heard in many places on the 8th, 14th, 15th, and 19th, and sheet lightning was seen at Epsom on the 16th and 28th. Solar haloes were seen at Greenwich on the 1st, 2nd, 3rd, 9th, 11th, 23rd, 24th, and 27th; at Epsom on the 2nd, 9th, 11th, 20th, 24th, and 25th; and at Wallington on the 9th and 24th. The month, as a whole, has been a healthy one, though in some parts there have been cases of diphtheria and scarlet fever. The rainfall varies from 1·29 in. above the average at Croydon, and 1·22 in. at Greenwich, to 0·70 in. at Wimbledon, 0·61 in. at Wallington, and 0·31 in. at Surbiton. The mean temperature of the month is about one-fourth of a degree below the average, and was at Epsom 62°·9, at Worcester Park 62°·7, at Croydon (Park Hill House) 62°·4, at Wallington 62°·3, and at Warlingham 61°·0. At Croydon (Park Hill House) evaporation was ·13 in., and percolation ·32 in., under the average. There were recorded at Wallington 193·2 hours of sunlight, which is 22·4 hours, or five per cent., below the July average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

NOTES.

AUGUST, 1908.

The distribution of the rainfall in this month was different to that of the two preceding ones. The drought of July broke upon the 5th with a rather heavy rain, amounting at Chaldon to nearly an inch, and from then till the 19th inclusive, with the exception of slight showers on the 10th and 12th, it was fine with a moderate temperature, but from the 20th till the end of the month it was marked by continuous and heavy falls and very stormy conditions. Thunderstorms occurred in the latter part of the month, chiefly on the 20th, 22nd, 25th, 28th, 29th, and 30th, in various portions of the district, and hail fell in many places on the 28th. Heavy dews were experienced in the early part of the month, and at Wallington there was haze on the 9th, 10th, 17th, and 18th. A rainbow was observed at Wallington and Beddington on the 28th, and on the 30th there was a remarkable one at Abinger. A mock sun, south of the sun, was seen at Purley at 6 p.m. on the 24th. Solar haloes were observed at Epsom on the 3rd, 4th, 9th, 10th, and 13th, and at Greenwich on the 3rd, 4th, 10th, and 27th; whilst lunar ones were seen at Epsom on the 11th, and at Greenwich on the 13th. The observer at Nutfield complains greatly at the mischief done by blackbirds and thrushes to the wall fruit, and mentions the total absence of wasps. The observer at Sanderstead refers to the damage done by the gales to the fruit trees; and the observers at West Wickham and Abinger Hall say that the corn is suffering from the continuous rain, and the former mentions that potatoes look diseased. The month as a whole has been a healthy one, and summer diarrhœa has been little prevalent. With reference to the rate of fall of rain, the observer at the County Hall, Kingston, says that on the 25th ·26 in. fell in twenty minutes, and at Epsom on the 22nd ·16 in. fell in three minutes between 11·13 and 11·16 a.m. The rainfall is just over an inch above the average, and in the Wallington record of over twenty-five years there are only four Augusts with a larger amount. The mean temperature of the month is between 1°·9 and 1°·8 below the average, and in the Wallington record of over twenty years there are only three colder Augusts. The temperatures are: at Worcester Park 60°·3, at Epsom 60°·2, at Croydon (Park Hill House) 60°·1, at Wallington 59°·9, and at Warlingham 58°·6. At Croydon (Park Hill House) evaporation was 2·93 in., which is ·26 in. above the average, and there was no percolation. There were recorded at Wallington 196·3 hours of sunlight, which is 1·8 hours, or one per cent., below the August average of the twenty years 1886–1905, and in this record there have been only eight Augusts with a smaller amount.

F. Campbell-Bayard, F.R.Met.Soc.,
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Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
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2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	·02	..	..	·01	..	·04	·02	·02	·02	..	..	..	..	..	..	·06	..	·02	..	..
5	·22	·19	·24	·22	·32	·20	·33	·30	·28	·22	·20	·23	·32	·30	·24	·34	·25	·29	·11	·15	·12	·19	·93	·32	·38	·28
6	..	..	..	..	..	..	..	..	..	..	..	·01	·01	..	·01	..	..	..	..	..	..	..	..	..	..	·01
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·03	·03	·05	·05	·08	·03	·07	·05	·05	·03	·03	·06	·04	·05	·04	·09	·09	·10	·30	·11	·10	·10	·09	·09	·12	·05
11	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
12	..	·01	·01	·03	·04	·01	·02	·01	·01	·01	·01	·01	·03	·02	·02	..	·02	..	..	·03	·02	·02	..	·01	·02	·02
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·24	·19	·44	·25	·30	·48	·55	·39	·35	·37	·40	·45	·18	·44	·37	·40	·47	·30	·30	·19	·29	·48	·43	·42	·42	·41
21	·39	·26	·22	·19	·14	·08	·08	·02	·02	·07	·02	·03	..	·03	·01	·02	·03	·05	·11	·14	·02	·03	·03	·20	..	·08
22	·21	·08	·75	·20	·34	·15	·37	·26	·26	·33	·46	..	·27	·60	·32	·38	·32	·08	·25	·22	·32	·55	·29	·23	·32	·21
23	1·11	1·22	1·23	1·22	1·13	1·06	1·00	1·13	1·13	·92	1·12	1·51	·83	·95	·95	1·10	1·11	1·12	1·00	1·01	1·02	·99	1·00	1·00	1·13	·89
24	·22	·20	·28	·34	·33	·14	·16	·12	·10	·10	·08	·15	·09	·12	·14	·12	·36	·20	·08	·06	·03	·26	·36	·31	·15	·15
25	·05	·07	·14	·13	·10	·02	·05	·02	·02	..	·02	·02	·03	·01	..	·03	·05	·06	·09	·08	·13	·07	·06	·04	·05	·01
26	·34	·29	·31	·24	·31	·28	·34	·27	·26	·28	·29	·30	·25	·25	·28	·33	·35	·26	·20	·20	·16	·28	·32	·33	·38	·31
27	·43	·41	·44	·35	·33	·41	·47	·28	·29	·33	·14	·33	·37	·31	·30	·33	·30	·33	·35	·36	·37	·30	·30	·32	·31	·19
28	·74	·41	·37	·41	·55	·62	·49	·58	·52	·52	·94	·67	1·16	·60	·80	·49	·59	·46	·30	·51	·34	·51	·54	·55	·61	·78
29	·21	·15	·17	·19	·13	·15	·15	·16	·16	·13	·33	..	·10	·21	·26	·10	·11	·18	·25	·08	·10	·13	·15	·26	·19	·36
30	·09	·04	·12	·09	·08	·12	·11	·10	·10	·09	·14	·21	·05	·05	·09	·13	·01	·01	·05	..	·04	·01	·01	·01	·03	·04
31	·69	·68	·75	·74	·63	·52	·55	·40	·44	·43	·46	·36	·44	·31	·35	·41	·46	·68	·65	·67	·50	·52	·44	·47	·45	·37
*	4·97	4·23	5·52	4·65	4·81	4·27	4·76	4·09	3·99	3·84	4·64	4·38	4·19	4·28	4·20	4·27	4·52	4·12	4·04	3·81	3·56	4·50	4·95	4·58	4·56	4·16
†	22·67	21·93	24·44	22·38	22·34	20·01	22·80	20·36	19·60	19·06	19·04	22·53	22·04	20·86	21·28	20·65	22·59	20·50	20·74	19·57	17·65	21·67	21·57	21·71	22·43	23·74

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (PlaceFell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (ParkH.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	·03	·02		·01	·02	·16	·07	..	·06	·01	·02	·01	·02	..	..	..	·01	..	·02	..	..	..	..	..	..	..
5	·30	·27		·31	·20	·05	·23	·27	·25	·19	·16	·15	·16	·17	·19	·14	·17	·15	·15	·13	·07	·11	·11	·10	·13	·13
6	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·08	·06		·08	·07	·10	·12	·13	·13	·11	·10	·12	·13	·11	·10	·10	·13	·09	·10	·10	·09	·08	·10	·11	·10	·11
11	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	·03	·02		·02	·02	·03	·03	·03	·03	·04	·03	·02	·02	..	·03	·04	·03	·03	·02	·03	·03	·03	·03	·03	·04	·04
13	·01	·01		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..		..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..
20	·48	·46		·42	·47	·50	·31	·33	·31	·23	·50	·48	·47	·51	·35	·34	·35	·38	·46	·47	·42	·45	·48	·45	·46	·48
21	·03	·02		..	·02	..	·02	..	·05	·10	..	..	..	..	·02	·05	·05	..	..	..	·01	·01	..	..	..	·04
22	..	..		·29	·28	·70	·19	·13	·24	·20	·29	·24	·45	·39	·30	·30	·43	·21	·29	·16	·52	·30	·19	·16	·23	·33
23	1·10	1·08		·93	·90	·48	1·00	1·14	1·09	·98	·85	·91	·99	·88	·87	·86	·80	·82	·87	·83	·44	·73	·82	·75	·84	·73
24	·15	·13		·54	·16	·14	·05	·05	·08	·04	·09	·08	·10	·09	·04	·04	·04	·06	·04	·05	·05	·04	·06	·03	·04	·04
25	·09	·07		·04	·05	·01	·08	·08	·07	·09	·06	·05	·05	..	·13	·20	·17	·18	·12	·12	·14	·10	·14	·11	·11	·10
26	·24	·21		·34	·23	·26	·22	·18	·25	·18	·19	·19	·23	·25	·13	·16	·18	·15	·14	·15	·14	·14	·15	·12	·15	·15
27	·18	·16		·34	·28	·26	·30	·06	·32	·30	·27	·23	·23	·27	·32	·30	·42	·41	·26	·28	·37	·28	·29	·29	·29	·33
28	·76	·75		·60	·53	·29	·35	·58	·38	·33	·35	·41	·45	·34	·30	·18	·34	·32	·27	·29	·28	·30	·27	·29	·29	·26
29	..	..		·40	·26	·38	·14	·13	·12	·09	·15	·13	·25	·26	·06	·12	·07	·08	·05	·06	·07	·06	·05	·05	·07	·07
30	·28	·26		·02	·06	·04	·03	·03	·..	·02	·10	·10	·07	·05	·09	·10	·08	·10	·14	·15	·07	·10	·09	·10	·15	·08
31	·33	·32		·49	·40	·48	·69	·65	·22	·60	·47	·54	·48	·55	·05	·44	·54	·52	·60	·56	·52	·52	·52	·41	·50	·50
*	4·09	3·84	4·31	4·83	3·95	3·88	3·83	3·79	3·60	3·53	3·63	3·66	4·10	3·87	2·98	3·37	3·81	3·50	3·53	3·38	3·22	3·25	3·30	3·02	3·40	3·39
†	22·09	20·19	21·26	22·85	19·41	20·09	19·98	19·79	21·01	21·98	18·07	18·03	20·53	20·59	17·49	17·77	18·69	17·73	19·55	19·10	17·02	18·76	18·12	18·00	19·66	19·52

MONTHLY GAUGE.

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump. St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (The Downs)	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	·01	·02	·02	..	..	·02	·03	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	·01	..	..
5	·15	·15	·23	·24	·22	·27	·21	·26	·23	·15	·18	·09	·08	·11	·16	·06	·10	·10	·11	·10	·01	·02	·05	·03	·06	·02
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·10	·09	·10	·13	·12	·13	·07	·04	·09	·09	·11	·10	·10	·11	·13	·18	·15	·14	·17	·13	·14	·19	·14	·22	·15	·06
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	·04	·04	·04	·04	..	·05	·05	·11	·07	·07	·06	·05	..	·05	·03	·03	·05	·04	·02	·03	·02	·02	·02	·03	·04	·04
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·48	·52	·45	·51	·44	·58	·45	·45	·46	·48	·42	·58	·54	·51	·46	·33	·34	·32	·27	·30	·28	·26	·33	·33	·33	·28
21	..	·01	..	·03	·03	..	·04	·06	..	..	..	..	..	..	·02	·03	·06	·05	·07	·11	·01	·01	·03	·02	·04	·02
22	·24	·20	·25	·33	·45	·71	·22	·06	..	·14	·47	·31	·40	·20	·24	·24	·10	·13	·31	·27	·14	·12	·22	·67	·28	·16
23	·86	·87	·87	1·04	·65	·93	·82	·77	·89	·87	·85	·82	·81	·87	·79	·83	·83	·78	·73	·87	·72	·78	·82	·50	·86	·69
24	·06	·08	·13	·09	·08	·13	·16	·08	·12	·07	·08	·07	·05	·08	·04	·11	·10	·07	·08	·03	·11	·11	·09	·16	·15	·08
25	·07	·05	·04	·07	·07	·04	·02	·05	·15	·14	·10	·26	·22	·28	·24	·17	·29	·36	·28	·23	·31	·03	·41	·08	·26	·01
26	·18	·16	·23	·18	·17	·23	·18	·12	·15	·17	·10	·18	·10	·19	·16	·11	·12	·11	·09	·19	·10	·09	·10	·10	·11	·22
27	·27	·26	·28	·26	·24	·17	·22	·16	·28	·30	·20	·28	·48	·39	·46	·31	·33	·32	·31	·39	·28	·20	·31	·28	·32	·12
28	·38	·40	·44	·54	·37	·65	·52	·34	·25	·27	·31	·35	·24	·28	·32	·47	·28	·19	·20	·20	·13	·46	·16	·57	·32	·30
29	·07	·11	·16	·08	·10	·12	·17	·10	·07	·05	·08	·05	·04	·06	·04	·02	·02	·01	·02	·03	·02	·04	·02	·02	·03	·05
30	·17	·15	·11	·10	·09	·10	·06	·11	·05	·10	·09	·09	·11	·14	·17	·06	·11	·15	·13	·09	·07	·21	·15	·18	·13	·15
31	·55	·45	·42	·44	·43	·42	·35	·21	·35	·34	·34	·45	·38	·37	·46	·33	·34	·34	·30	·41	·25	·32	·30	·34	·30	·27
*	3·63	3·56	3·78	4·08	3·46	4·55	3·57	2·92	3·16	3·24	3·40	3·68	3·55	3·64	3·72	3·28	3·22	3·11	3·09	3·38	2·59	2·86	3·16	3·54	3·38	2·47
†	20·17	19·50	20·14	20·89	19·83	21·79	19·91	15·29	17·95	18·28	17·34	20·58	18·32	19·73	18·84	15·27	18·39	16·63	16·64	17·03	16·28	16·71	17·52	19·66	18·52	14·89

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsworth Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Camberwell (The Green)	Camberwell (Town Ha.)	Camberwell (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	·03	·02	·08	·07	·10	·09	·04	·08	·07	·05	·19	·20	·10	·05	·04	·08	·13	·10	·05	..	..	·04	·04	·07	·03	·04
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·11	·12	·14	·13	·09	·12	·28	·20	·20	·11	·05	·07	·12	·09	·11	·15	·17	·12	·10	·04	·01	·04	·11	·13	·11	·08
11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	·05	·04	·04	·06	·04	..	·07	·06	·06	·05	·09	·11	·10	·06	·05	·05	·05	·06	·03	·05	·02	·05	·08	·09	·06	·05
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·27	·28	·34	·42	·42	·45	·50	·48	·48	·34	·35	·43	·53	·49	·42	·60	·45	·45	·33	·45	..	·39	·46	·47	·44	·38
21	·01	..	·05	·05	..	·01	·01	·02	·04	..	..	·02	..	·02	..	..	·03	·05	·02	..	..	..	..	..	..	..
22	·11	·15	·11	·31	·40	·31	·20	·27	·23	·16	·09	·08	·09	·30	·15	·12	·29	·20	·04	·23	..	·14	·30	·26	·33	·40
23	·82	·78	·82	·86	·84	·76	·75	·84	·80	·22	·69	·80	·80	·69	·23	1·05	·58	·74	·75	·20	·52	·22	·74	·65	·69	·56
24	·09	·09	·10	·15	·05	·06	·03	·04	·08	·05	·07	·07	·07	·09	·07	·12	·11	·12	·09	·08	·06	·06	·12	·11	·09	·07
25	..	..	·02	·06	·50	·46	·40	·32	·39	·04	·08	·08	·22	·17	·03	·25	·09	·02	..	·03	·05	·04	·18	·13	·14	..
26	·20	·20	·18	·15	·10	·14	·13	·28	·13	·10	·19	·21	·10	·13	·11	·15	·05	·14	·11	·13	·16	·10	·18	·19	·13	·10
27	·17	·17	·11	·29	·12	·31	·23	·20	·28	·21	·21	·28	·34	·21	·13	·28	·36	·15	·17	·23	·20	·10	·24	·24	·21	·22
28	·23	·23	·50	·52	·35	·27	·43	·30	·25	·24	·25	·29	·37	·57	·24	·57	·47	·31	·28	·38	·48	·37	·60	·54	·60	·29
29	·06	·07	·01	·01	·02	·03	·12	·03	·01	·01	·05	·06	·01	·01	..	·01	·01	·05	·02	..	..	..	·04	·01	..	·02
30	·03	·03	·08	·11	·14	·19	·23	·20	·28	·10	·11	·16	·18	·10	·11	·20	·16	·07	·06	·08	·06	·05	·10	·09	·09	·04
31	·29	·30	·30	·27	·31	·38	·27	·29	·31	·32	·26	·25	·30	·25	·24	·31	·37	·32	·25	·28	·26	·14	·29	·31	·27	·24
*	2·47	2·48	2·88	3·46	3·48	3·58	3·69	3·61	3·61	2·00	2·68	3·11	3·33	3·23	1·93	3·94	3·32	2·90	2·30	2·18	1·82	1·74	3·48	3·29	3·19	2·50
†	16·70	16·54	17·03	18·19	17·83	19·31	19·84	18·15	18·50	14·80	14·93	17·51	17·74	15·37	13·42	21·32	18·71	18·16	14·08	14·91	9·65	12·29	18·16	17·84	17·16	15·06

* The figures in this row give the totals for the month. † The totals from January 1st

Daily Rainfall. *Greenwich average 90 years (1815–1904) for September is 2·24 in., and from 1st January 17·37 in.* **September, 1908.**

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Mersham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·11	·18	·26	·24	·23	·16	·29	·18	·15	·16	·10	·37	·14	·10	·19	·25	·36	·10	·19	·08	·09	·13	·24	·18	·24	·30
2	·15	·13	·22	·55	·34	·32	·31	·26	·26	·23	·22	·12	·07	·12	·20	·12	·16	·17	·21	·18	·14	·18	·15	·14	·16	·10
3	·33	·44	·43	·64	·58	·45	·46	·49	·35	·52	·43	·69	·73	·64	·54	·53	·63	·63	·60	·52	·54	·67	·58	·12	·59	·69
4	·14	·04	·07	·06	·05	·02	·04	·03	·02	·03	·02	·10	·04	·10	·06	·04	·05	·05	·09	·06	·04	·07	·05	·06	·05	·08
5	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	·01	·02	·03	·01	·01	·01	·01	·01	·01	·01	..	..	..	..	..	·02	·01	..	..	..	..	..	..	..	..
9	..	·01	·01	·02	·01	·02	·02	·02	·02	..	·02	·02	·03	..	..	·02	..	..	..	..	..	..	..	..	..	·04
10	..	..	..	..	..	·01	..	·01	·01	·02	..	·01	·02	..	..	..	·01	..	..	..	..	..	..	..	..	..
11	·11	..	..	·04	·05	·03	·05	·03	·03	·01	·01	..	..	..	..	..	·02	..	..	·05	·02	·02	..	·01	·04	..
12	..	..	..	..	..	..	·01	..	..	..	..	..	·03	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·09	·03	·03	·04	·03	·07	·11	·11	·11	·09	·06	·07	·03	·07	·04	·10	·07	·06	·09	·03	·10	·06	·07	·07	·12	·03
16	..	..	·01	·02	·01	·01	·01	·01	..	·01	..	..	·03	·01	..	..	..	·01	..	..	..	..	..	·01	..	..
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·03	..	..	..	..	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·04	·02	·05	·05	·07	·06	·07	·07	·07	·05	·03	·02	·04	·02	·02	·05	·07	·06	·08	·05	·01	·04	·05	·03	·03	·03
21	..	..	..	..	..	..	..	..	..	..	·03	·02	·01	·01	..	·01	..	..	..	..	·05	..	..	·01	..	..
22	·02	·01	..	..	·02	..	·02	·03	·03	·02	·02	·07	·06	·03	·06	·03	·02	..	..	..	..	·02	·03	·04	·06	·01
23	·11	·14	·18	·17	·13	·12	·15	·13	·12	·12	·09	·14	·09	·14	·16	·13	·14	·08	..	·06	·01	·11	·11	·16	·16	·07
24	..	..	·01	·07	·04	·02	·06	·03	·03	..	·03	·08	·03	·05	·03	..	·06	·16	·27	·08	·15	·09	·03	·04	·03	·06
25	·06	·09	·12	·09	·05	·06	·06	·05	·04	·04	·05	·04	·03	·03	·04	·05	·06	·06	·08	·07	·09	·06	·05	·04	·06	·04
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·08	·04	·03	·07	·08	·05	·08	·06	·06	·04	·04	·09	·08	·08	·07	·06	·07	·04	..	·03	·01	·06	..	·06	·07	..
28	·01	..	..	..	·01	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..
30	..	..	..	..	·01	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1·25	1·14	1·46	2·09	1·74	1·41	1·76	1·53	1·31	1·35	1·16	1·86	1·46	1·40	1·41	1·39	1·74	1·43	1·61	1·24	1·26	1·51	1·36	·97	1·61	1·45
†	23·92	23·07	25·90	24·47	24·08	21·42	24·56	21·89	20·91	20·41	20·20	24·39	23·50	22·26	22·69	22·04	24·33	21·93	22·35	20·81	18·91	23·18	22·93	22·68	24·04	25·19

* The figures in this row give the totals for the month. † The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for September is 2·24 in., and from 1st January 17·37 in.* **September, 1908.**

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (PlaceFell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump.St.)	Sutton (Waterwk.)	Sutton (Sew.Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (Park H.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·38	·36		·21	·15	·13	·09	·12	·15	·09	·11	·11	·19	·15	·04	·05	·07	·06	·06	·06	·05	·05	·05	·05	·07	·14
2	·09	·07		·13	·10	·12	·03	·13	·18	·11	·09	·08	·10	·09	·07	·15	·16	·15	·13	·14	·12	·12	·12	·11	·11	..
3	·75	·73		·78	·67	·71	·73	·69	·75	·58	·18	·65	·66	·72	·64	·66	·69	·59	·67	·60	·58	·69	·59	·65	·70	·70
4	·05	·04		·08	·06	·07	·05	·07	·06	·06	·07	·06	·06	..	·06	·07	·09	·05	·06	·05	·04	·05	·05	·05	·06	·04
5	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	·01	·01		..	..	·01	·01	..	·01	·03	..	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
9	·02	·02		..	..	..	..	..	..	·01	..	..	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..		·01	..	·01	·01	..	·02	·02	·01	·01	·01	..	..	·10	·02	..	·02	·01	..	..	..	..	..	..
11	·04	·03		..	..	..	..	..	..	·02	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..		..	..	..	..	..	..	..	..	..	..	..	..	·02	·02	..	..	..	..	..	..	..	..	..	..
13	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·07	·05		·06	·04	·05	·04	·06	·05	·07	·04	·04	·05	·06	·06	·04	·10	·09	·07	·06	·04	·06	·05	·05	·06	·06
16	..	..		..	..	..	..	..	..	·01	·01	..	..	..	..	..	·01	..	..	..	..	..	..	·01	..	..
17	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..		..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	..	..		..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·02	·02		·04	·03	·04	·03	·05	·06	·05	·03	·02	·03	..	·03	·04	·05	..	·03	·03	·03	·03	·02	·02	·03	·03
21	·02	·02		..	..	..	..	..	..	..	..	·01	..	..	·01	..	..	..	·01	·01	..	..	..	..	·01	..	·01
22	·05	·03		·04	·04	·04	·02	·03	·02	·02	·03	·02	·03	..	·02	·01	·03	..	·04	·02	·02	·02	·02	·03	·04	·03
23	·10	·09		·16	·10	·13	·07	·05	·05	·07	·14	·14	·17	·08	·16	·26	·25	·33	·20	·25	·35	·20	·22	·26	·27	·20
24	·08	·06		·04	·05	·05	·26	·31	·23	·43	·04	·04	·07	·15	·16	·19	·21	·08	·07	·07	·05	·04	·03	·02	·03	·05
25	·11	·09		·05	·03	·04	·04	·05	·05	·06	·03	·03	·03	·04	·04	·06	·05	·04	·04	·03	·03	·03	·03	·03	·04	·04
26	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·10	·09		·06	·03	·04	·03	·03	·03	·03	·04	·03	·04	·06	·04	·04	·05	·05	·05	·05	·04	·04	·05	·04	·05	·05
28	..	..		..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	..		..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..		..	..	·01	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..
*	1·89	1·71	1·72	1·66	1·30	1·45	1·41	1·59	1·66	1·69	·83	1·24	1·48	1·35	1·34	1·69	1·81	1·45	1·45	1·38	1·35	1·33	1·23	1·33	1·47	1·35
†	23·98	21·90	22·98	24·51	20·71	21·54	21·39	21·38	22·67	23·67	18·90	19·27	22·01	21·94	18·83	19·46	20·50	19·18	21·00	20·48	18·37	20·09	19·35	19·33	21·13	20·87

MONTHLY GAUGE.

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump. St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (TheDowns)	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·08	·07	·10	·10	·08	·12	·10	·12	·10	·12	·06	·14	·10	·13	·06	·09	·12	·14	·10	·06	·08	·16	·08	·11	·13	·06
2	·10	·12	·09	·14	·17	·11	·09	·08	·06	·08	·11	·12	·09	·13	·14	·01	·20	·16	·13	·15	·12	·08	·15	·16	·14	·09
3	·72	·77	·74	·84	·90	·83	·75	·52	·70	·70	·73	·68	·75	·74	·64	·58	·78	·79	·69	·62	·62	·63	·72	·70	·72	·73
4	·07	·06	·06	·05	·05	·07	·05	·03	·05	·05	·05	·06	·04	·06	·05	·03	·05	·04	·04	·05	·05	·06	·04	·04	·06	·05
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	·01	·02	·01	·01	·02	·03
10	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	·01	·01	..	..	·01	·01	·02	·02	·01
11	..	·02	·02	·02	..	..	..	·04	·08	..	..	·01	·04	..	..	..	..	..	..	..	·02	..	..	..	..	..
12	..	..	..	..	..	..	..	·09	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	·03	·02
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·03	·05	·07	·06	·10	·04	·04	·04	·05	·06	·06	·07	·09	·09	·11	·11	·12	·10	·10	·08	·10	·11	·10	·12	·11	·08
16	·01	·01	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	·01
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	·02	..	..	..	·02	..	·01	..
19	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..
20	·03	·03	·02	·04	·08	·05	·03	·01	·03	·04	·05	·02	·02	·02	·06	·03	·04	·03	·03	·05	·04	·04	·04	·04	·01	·03
21	·01	·02	..	..	..	..	·02	·04	·01	..	..	·04	..	·01	..	·01	..	..	..	..	..	..	..	·01	·04	..
22	·03	·05	·06	·05	·02	·05	·03	·01	·03	·04	·04	·10	·05	·03	·03	..	·05	·05	·01	·02	..	..	..	·01	..	..
23	·21	·14	·16	·11	·10	·10	·05	·04	·23	·09	·15	·32	·32	·52	·30	·09	·25	·35	·13	·18	·06	·03	·20	·08	·01	·02
24	·05	·04	·02	·02	..	·07	·11	·30	·04	·01	·03	·07	·09	·02	·11	·09	·19	·26	·19	·24	·03	·02	·05	·23	·30	·05
25	·04	·03	·03	·04	·06	·03	·03	..	·03	..	·03	·05	·02	·03	·03	·05	·07	·06	·07	·08	·04	·06	·07	·05	·18	·05
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·05	·05	·05	·05	..	·06	·05	·01	·02	·06	·05	·05	·03	·05	·05	·03	·05	·05	·03	·03	·01	·02	·02	·04	·04	·05
28	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	·01	..	·01	·01
29	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..
*	1·46	1·50	1·42	1·52	1·56	1·54	1·36	1·34	1·43	1·25	1·36	1·73	1·64	1·83	1·60	1·13	1·98	2·04	1·55	1·56	1·18	1·24	1·53	1·65	1·84	1·29
†	21·63	21·00	21·56	22·41	21·39	23·33	21·27	16·63	19·38	19·53	18·70	22·31	19·96	21·56	20·44	16·40	20·37	18·67	18·19	18·59	17·46	17·95	19·05	21·31	20·36	16·18

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for September is 2·24 in., and from 1st January 17·37 in.* **September, 1908.**

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsw'th. Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	·11	·11	·09	·11	·11	·11	·43	·05	·12	·11	·09	·06	·08	·05	·05	·10	·05	·06	·06	·06	·08	·02	·09	·07	·06	·03
2	·08	·08	·10	·10	·11	·11	·12	·14	·07	·05	·05	·12	·11	·07	·07	·10	·10	·10	·11	·14	·11	·07	·12	·19	·12	·20
3	·79	·78	·74	·70	·74	·77	·86	·75	·61	·72	·50	·76	·64	·60	·68	·82	·62	·78	·56	·67	·65	·60	·60	·64	·61	·56
4	·05	·05	·06	·04	·06	·04	..	·07	·06	·05	·10	·07	·05	·05	·05	·06	·05	·06	·03	·05	·04	·05	·06	·05	·03	·04
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	·05	·05	·01	·02	..	·01	..	..	..	..	..	..	..	·01	..	..	·01	·06	..	·01	..	..	..	·02	..	·01
10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	·01	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	·01	..	..
12	·02	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15	·09	·09	·11	·10	·10	·10	·07	·09	·09	·07	·04	·10	·04	·09	·11	·12	·12	·10	·07	·12	·12	·10	·12	·10	·08	·07
16	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	·01
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	·01	·01	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·02	·03	·03	·03	..	·04	·04	·02	·03	..	·01	·01	·02	·02	·02	·03	·04	·04	..	·01	·02	·02	·04	·03	·02	·01
21	·03	·01	..	·01	·02	·01	..	..	·02	·01	·04	·06	·01	·01	·01	·01	..	..	..	..	·02	..	·02	·01	..	..
22	·03	·02	·05	·04	·02	·02	·03	·07	·06	·03	·01	..	·02	·05	·03	·02	·01	·03	..	·02	·04	·04	·08	·02	·02	·05
23	..	..	..	..	·32	·39	·33	·05	·11	·01	·01	·05	·09	·03	·02	·01	·01	..	..	·02	·01	·01	·03	·01	..	·01
24	·01	..	·13	·02	·03	·03	·08	·22	·08	·09	·22	·46	·04	·19	·01	·04	..	..	..	·20	·23	·18	·30	·02	·20	·26
25	·06	·06	·05	·06	·03	·03	·04	·05	·04	·01	·01	·02	·03	·03	·01	·04	·04	..	·03	·03	·02	·03	·04	·02	·02	·02
26	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·05	·04	·04	·04	·03	·03	·03	..	·02	·02	..	·05	..	·01	..	·03	·04	·02	..	·01	..	..	·02	..	..	..
28	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1·42	1·35	1·41	1·31	1·57	1·69	2·03	1·51	1·34	1·17	1·09	1·76	1·13	1·21	1·06	1·38	1·12	1·25	·86	1·34	1·36	1·12	1·52	1·21	1·16	1·27
†	18·12	17·89	18·44	19·50	19·40	21·00	21·87	19·66	19·84	15·97	16·02	19·27	18·87	16·58	14·48	22·70	19·83	19·41	14·94	16·25	11·01	13·41	19·68	19·05	18·32	16·33

* The figures in this row give the totals for the month. † The totals from January 1st.

NOTES.

SEPTEMBER, 1908.

The wet weather at the end of August continued until the 4th. From that date till the 23rd–24th the weather was fine and cool with occasional showers. After the 24th, with the exception of slight showers on the 25th and 27th, it became fine and very warm, culminating on the 30th with a maximum shade temperature of 82°·0 at Epsom, 79°·9 at Greenwich, 78°·9 at Worcester Park, 78°·0 at Nutfield Priory and Park Hill House, Croydon, 77°·5 at Benhilton, 76°·8 at Wallington, 74°·8 at Warlingham, at 72°·0 at Sevenoaks. The minimum temperatures in the shade were also high during the last three days, reaching 60°·7 at Benhilton on the 28th, and 60°·0 at Epsom on the 29th. There were very heavy dews during these last three days. A thunderstorm occurred throughout the district on the 2nd, and there was a violent gale on the 9th, which took off the top of a large elm in Riddlesdown Road, Purley. Solar haloes were seen at Greenwich on 3rd, 11th, 13th, 15th, 16th, 20th, and 21st; at Nutfield on 1st, 9th, 11th, 22nd, and 26th; at Epsom on the 3rd, 8th, 15th, 16th, 19th, 20th, and 21st; at Purley on the 2nd and 15th; and at Wallington on the 16th: and a lunar halo was seen at Epsom on the 15th, and at Beddington and Greenwich on the 14th. No wasps have been observed. The last swallow was seen at Nutfield on the 28th. Potatoes round West Wickham are badly diseased, and outdoor tomatoes also. It has been a fine fruit harvest, but the crop, though large, does not seem to keep well. There was a frost in some places on the night of the 12th–13th, which at Abinger destroyed dahlias, scarlet runner beans, and vegetable marrows. At Abinger a very lively red adder was seen on the 25th. The month has been fairly healthy, there having been but little summer diarrhœa, but there is the usual autumnal increase of scarlet fever and diphtheria. The rainfall of the month varies from a quarter to half an inch below the average. The mean temperature of the month varies from one-half to a degree below the average, and was at Park Hill House, Croydon, 57°·1, at Epsom 56°·8, at Wallington and Worcester Park 56°·6, at Warlingham 55°·7, and at Sevenoaks 54°·5. At Park Hill House, Croydon, evaporation was 1·615 in., being one-fifth above the average, and water passed through the chalk percolation gauge after the rain on the 3rd. There were recorded at Wallington 165·2 hours of sunlight, which is 5·5 hours, or two per cent. above the September average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

NOTES.

OCTOBER, 1908.

The month has been a very remarkable one in many respects. It is the warmest October, with the exception of 1906, and the sunniest, with the one exception of 1888, in the Wallington record commencing in 1884, and in this period the absolute shade maximum of 77°·8 on the 2nd, and the mean shade maximum 62°·3, have never been exceeded. The rainfall, however, is from one-third to half an inch below the average. With reference to the great fall at Kenley on the 16th inquiry has been made, and a very interesting account has been received from the observer, and there is no doubt as to correctness; and with reference to this, the fall at Wallington on this day took place between 4 and 5 a.m.—that is, in one hour. The only other record of the rate of fall is at Abinger Hall on the 18th, when 1·19 in. fell in four and a half hours, between 3 and 7·30 a.m. Depositions of moisture owing to fog or dew frequently occurred during the month. There was a thunderstorm at Nutfield and Upper Gatton on the 27th, and on the same day thunder was heard at Croydon, and lightning seen at Beddington. Sleet or hail fell at Nutfield, Beddington, Kew, and Greenwich on the 24th, and sheet lightning was observed at Epsom on the 19th, 25th, and 26th. Solar haloes were observed at Nutfield on the 27th and 31st, at Upper Gatton on the 29th, at Epsom on the 10th, 11th, 16th, 29th, and 31st, and at Greenwich on the 10th, 29th, and 31st; and a small double lunar halo was observed at Benhilton on the 11th. Rainbows were seen at Wallington on the 10th, at Nutfield on the 27th, and a double one on the same day at Epsom. The last swallows were seen at Nutfield on the 7th, and Purley on the 12th, and a fieldfare was observed at Nutfield on the 21st. The observer at Abinger Hall mentions that bees, flies of all kinds, and butterflies were numerous, and both he and the observer at West Wickham say that flowers of many kinds are in bloom. As might be expected, the month has been an unhealthy one, there having been numerous cases of diphtheria, scarlet fever, typhoid, and measles. The mean temperature of the month is between 4°·5 and 5°·0 above the average, and was at Croydon (Park Hill House) 54°·7, at Warlingham and Epsom 54°·3, at Worcester Park 54°·2, and at Wallington 53°·9. At Park Hill House, Croydon, percolation through the gravel gauge was ·788 in., but there was none through the chalk gauge, and the amount of evaporation was 1·075 in., which is a quarter of an inch above the average. At Benhilton the maximum temperature in the shade on the 29th was 68°·3. There were recorded at Wallington 135·5 hours of sunlight, which is 37·7 hours, or eleven per cent., above the October average of the twenty years 1886-1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

Wallington, Surrey, *November 18th, 1908.*

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	·01	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	·02	·01	·01	..	..	·02	..	..	..	..	..	..	..	·01	·01	·01	..	·01	..	..
8	·03	..	..	..	·01	..	..	..	·01	..	..	·01	..	..	..	..	·07	·05	..	..	..	·02	..	..	..	..
9	·24	·26	·27	·25	·22	·22	·27	·27	·25	·19	·03	·16	·16	..	·11	·25	·24	·19	·33	·24	·28	·21	·30	·22	·25	·22
10	..	·02	..	·03	·03	·04	·02	·02	·02	·04	·01	..	..	..	·04	..	·03	..	..	..	..	·01	..	..	..	..
11	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..
12	..	..	..	..	·01	..	..	·01	..	..	..	..	·03	..	..	..	·01	..	..	..	..	..	..	..	..	..
13	..	..	..	..	·01	..	..	..	·01	..	..	..	·02	..	..	..	..	..	..	..	..	·01	..	..	..	..
14	·02	..	..	..	·01	..	·01	..	..	..	·01	·01	..	..	..	..	·02	..	..	..	..	·01	..	·01	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·21	·18	·19	·19	·31	·34	·41	·34	·35	·44	·28	·15	·27	·15	·14	·43	·41	·31	·32	·16	·16	·46	·53	·50	·52	·21
17	..	..	..	..	·01	..	·01	·02	·01	·01	·01	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..
18	1·24	1·07	1·19	1·08	·81	·43	·33	·26	·24	·25	·22	·07	..	·05	·05	·26	·38	·80	·74	·74	·81	·38	·29	·32	·29	·06
19	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..
20	·23	·22	·36	·32	·29	·31	·40	·33	·31	·31	·31	·38	·45	·37	·35	·38	·39	·30	·15	·31	·37	·33	·40	·39	·39	·49
21	..	..	..	·04	·02	..	..	·01	..	..	·03	·03	..	·02	·02	..	..	·02	..	·02	·02	·02	·02	·02	·02	..
22	·03	·01	..	..	..	·02	·01	·01	·01	..	·01	·02	·04	·02	..	..	..	..	..	..	..	..	..	..	..	·01
23	..	..	..	..	..	·01	·02	·01	·01	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..
24	..	·02	..	..	·04	·05	·03	·04	·04	·01	·02	·24	·10	·02	·03	·06	·03	·06	..	·04	..	·02	·07	·04	..	·05
25	·16	·15	·21	·22	·18	·11	·19	·18	·17	·12	·05	..	·25	·23	·16	·22	·22	·15	·22	·15	·15	·18	·22	·21	·28	·15
26	·19	·19	·29	·17	·15	·15	·20	·14	·13	·12	·25	·12	·15	·14	·12	·13	·16	·13	·15	·19	·10	·17	·13	·13	·15	·21
27	·29	·28	·29	·29	·41	·42	·54	·50	·51	·52	·44	·70	·65	·70	·54	·46	·59	·45	·39	·24	·33	·51	·46	·60	·55	·61
28	·02	·01	·01	·03	·02	·02	·01	·02	·02	..	·03	·02	·03	·01	·01	·02	·02	·01	..	·02	·01	·03	·02	·02	·02	·04
29	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..	..	..	·01	..	..	·01	·01	·01	..	..	·02	..	..	..	·02	..	..	·01	..	·01	·01	..	..	..
31	..	..	·02	..	·01	..	..	·01	·01	..	..	·02	..	..	..	..	·01	..	..	..	..	·01	..	..	..	..
*	2·66	2·41	2·83	2·62	2·57	2·12	2·48	2·20	2·14	2·02	1·70	1·97	2·17	1·72	1·58	2·21	2·60	2·47	2·30	2·14	2·25	2·41	2·45	2·48	2·49	2·05
†	26·58	25·48	28·73	27·09	26·65	23·54	27·04	24·09	23·05	22·43	21·90	26·36	25·67	23·98	24·27	24·25	26·93	24·40	24·65	22·95	21·16	25·59	25·38	25·16	26·53	27·24

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (PlaceFell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech.rd.)	Purley (Riddl. rd.)	Purley (Pump.St.)	Sutton (Waterwk.)	Sutton (Sew.Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (ParkH.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..		..	..	..	·02		·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		..	..		..	..	..	·02		·01	..	..	·01	..	..	..	·01	..	..	..	..	..	..	..
3	..	..		..	..		..	..	..	·01		..	..	..	..	..	·01	..	·01	..	..	..	..	..	..	..
4	..	..		..	..		..	..	·05	·01		·01	..	..	·01	..	..	..	·01	..	..	·02	·01	·01	..	..
5	..	..		..	..		..	..	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..
6	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..		..	..		..	..	·02	·02		·01	·01	..	..	..	·01	..	·01	·01	..	..	..	..	·02	·01
8	..	..		..	..		·01	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
9	·05	·04		·20	·25		·26	·26	·22	·24		·25	·28	·34	·20	·22	·21	·23	·18	·19	·16	·24	·21	·23	·26	·25
10	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	·02	..	·01	..	..	..	..
11	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..
12	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..		..	..		..	..	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..		..	..		..	..	..	·01		..	..	..	·01	..	·01	..	·01	..	..	·02	..	..	..	..
15	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·26	·24		·42	1·43		·33	·33	·30	·20		·67	·56	·52	·47	·43	·35	·58	·54	·59	·57	·48	.53	·63	·66	·50
17	..	..		·03	·02		..	..	..	..		..	·01	..	..	..	..	..	·01	..	·01	..	..	..	..	..
18	·05	·04		·23	·28		·74	·74	·81	·70		·24	·29	·36	·65	·82	·77	·57	·46	·37	·36	·32	·28	·26	·27	·30
19	..	..		..	·01		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	·42	·41		·40	·45		·25	·25	·35	·38		·56	·50	·52	·36	·46	·45	·38	·44	·45	·40	·48	·47	·48	·55	·54
21	·05	·04		·03	..		·07	·07	·02	·02		·03	·04	..	..	·06	·04	·06	·05	·07	·05	·05	..	·05	·04	·05
22	·02	·02		..	..		..	..	..	·01		..	·09	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..		..	·01		..	..	..	..		..	..	..	..	·02	..	..	·01	..	..	·01	..	·01	·02	·01
24	..	..		·04	..		·06	·06	..	·03		·03	..	..	·03	..	·05	..	·04	·05	·03	·04	·09	·01	·01	·02
25	·15	·13		·24	·21		·07	·07	·24	·16		·13	·03	·23	..	·19	·14	·13	·15	·15	·09	·17	·13	·14	·18	·15
26	·12	·11		·13	·12		·18	·18	·12	·11		·15	·19	·12	·08	·08	·08	·08	·09	·09	·06	·08	·08	·07	·09	·07
27	·50	·48		·60	·50		·44	·44	·46	·34		·46	·46	·46	·41	·32	·40	·30	·37	·33	·30	·42	·36	·41	·42	·41
28	..	..		·02	·02		..	..	..	..		·01	·01	·01	..	·02	..	·01	..	..	..	·01	..	·01	..	..
29	..	..		..	..		..	..	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
30	..	..		..	..		..	..	..	·02		..	..	..	..	..	..	..	..	·01	..	·01	..	..	..	..
31	·05	·03		..	..		..	..	·02	..		..	·01	..	..	..	..	·01	·01	..	..	·01	..	..	..	..
*	1·67	1·54	2·20	2·34	3·30		2·41	2·40	2·61	2·30		2·57	2·51	2·56	2·23	2·62	2·52	2·35	2·40	2·31	2·05	2·36	2·17	2·32	2·54	2·31
†	25·65	23·44	25·18	26·85	24·01		23·80	23·78	25·28	25·97		21·84	24·52	24·50	21·06	22·08	23·02	21·53	23·40	22·79	20·42	22·45	21·52	21·65	23·67	23·18

MONTHLY GAUGE.

RECORD CEASED.

RECORD CEASED.

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump.St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (TheDowns	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..
2	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..
3	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
4	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	·02	..	..	..	..	..	·01	..	..
5	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
7	·02	·02	·01	..	..	..	..	..	·01	..	..	..	·01	·02	..	·01	·05	..	..	..	..	..	..	·01	..	·01
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..
9	·26	·25	·21	·18	·25	·17	·14	·16	·15	·22	·14	·24	·19	·20	·22	·20	·27	·23	·24	·24	·16	·17	·26	·27	·26	·21
10	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	·03	·02	·02	..	..	..	..	·02	·01	..	..	·01
11	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
12	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16	·54	·60	·38	·48	·48	·40	·33	·30	·37	·55	·43	·60	·75	·70	·60	·41	·33	·36	·10	·25	·36	·29	·13	·13	·14	·15
17	..	·10	..	..	..	·05	..	·01	·01	..	..	·15	·06	·01	..	..	..	..	..	..	..	..	..	..	..	..
18	·29	·17	·11	·04	·04	·05	·03	·02	·04	·05	·05	·12	·18	·27	·53	·75	·64	·64	·58	·71	·77	·81	·66	·67	·57	·60
19	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	·05	·01	..	·06	..
20	·57	·37	·37	·40	·40	·38	·36	·12	·28	·29	·35	·32	·29	·39	·42	·43	·43	·41	·37	·33	·46	·51	·34	·40	·29	·40
21	·04	·05	·03	..	..	·10	·01	·01	..	..	..	·02	·02	·02	·08	..	..	·03	·03	..	..	·02	·03	·03	·11	·02
22	·01	·01	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	·02	·01	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..
24	·03	·02	·02	..	·02	..	·03	·05	..	..	..	·02	..	·05	·02	..	·04	..	..	..	..	·01	·04	·03	..	..
25	·16	·18	·17	·19	·18	·11	·19	·08	·16	·19	·17	·14	·16	·16	·14	·10	·12	·10	·09	·18	·08	·07	·09	·10	·05	·06
26	·10	·10	·10	·10	..	·21	·09	·09	·11	·10	·11	·12	·10	·09	·08	·07	·11	·08	·06	·10	·07	·08	·06	·07	·07	·10
27	·40	·52	·60	·77	·75	·77	·49	·51	·46	·60	·61	·52	·41	·41	·32	·32	·34	·34	·36	·34	·33	·25	·30	·38	·38	·38
28	·01	·01	·01	..	..	..	·01	·01	·01	·01	..	..	..	·01	..	..	·01	..	..	..	·01	·03	·01	..	..	·02
29	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	·01	·01	..	..	..	·01	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..
31	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
*	2·51	2·54	2·01	2·16	2·12	2·25	1·70	1·39	1·60	2·01	1·86	2·25	2·17	2·34	2·44	2·38	2·37	2·22	1·83	2·15	2·24	2·32	1·94	2·12	1·95	1·96
†	24·14	23·54	23·57	24·57	23·51	25·58	22·97	18·02	20·98	21·54	20·56	24·56	22·13	23·90	22·88	18·78	22·74	20·89	20·02	20·74	19·70	20·27	20·99	23·43	22·31	18·14

* The figures in this row give the totals for the month.

† The totals from January 1st.

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsworth Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
2	..	..	..	..	·02	·01	..	..	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	·01	..	..
3	..	·01	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
4	·01	..	..	·01	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	·01	·01	..	..	..	·01	..	..	·02	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	·01	..	..
8	..	..	..	·02	..	..	..	·04	..	..	..	..	..	..	..	·04	..	..	..	..	..	..	..	..	..	..
9	·19	·19	·24	·28	·21	·19	·19	·14	·20	·19	·11	·15	·28	·18	·17	·22	·20	·26	·22	·14	·19	·18	·20	·23	·18	·17
10	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
11	..	..	..	..	·01	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
15	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
16	·17	·18	·25	·44	·64	·46	·70	·69	·73	·69	·30	·49	·78	·76	·71	·63	·62	·45	·45	·45	·52	·62	·67	·64	·83	·66
17	..	·01	..	·02	..	·01	·08	..	·06	·02	..	..	..	·02	·02	..	..	·02	..	..	..	·01	·03	·05	·03	..
18	·61	·60	·62	·65	·45	·33	·21	·27	·18	·12	·01	..	·03	·17	·06	·40	·42	·74	·45	·27	·20	·16	·18	·08	·09	·12
19	..	..	..	·05	·01	..	..	..	..	·01	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..
20	·48	·45	·46	·38	·30	·36	·33	·29	·22	·24	·21	·27	·21	·23	·18	·32	·33	·39	·21	·20	·21	·20	·20	·18	·21	·15
21	·02	·05	·02	·06	·08	·02	·02	..	·01	·01	..	..	..	..	..	·02	..	·02	..	·01	..	·01	·03	..	..	..
22	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·03	..	..	..	..	..	..	..	..	..
24	..	·01	..	·02	·03	·03	..	..	·06	·03	..	·02	..	..	..	·02	·01	..	..	..	..	·01	·05	..	·02	..
25	·07	·07	·09	·06	·06	·05	·22	·19	·11	·09	·08	·10	·11	·13	·02	·10	·10	·14	·15	·07	·03	·04	·08	·08	·08	·06
26	·08	·08	·10	·14	·11	·09	·10	·09	·07	·04	·07	·07	·08	·05	·18	·09	·08	·07	·25	·12	·10	·07	·09	·11	·09	·05
27	·37	·38	·41	·38	·37	·40	·37	·46	·46	·41	·35	·47	·45	·42	·42	·50	·37	·44	·36	·44	·41	·44	·55	·53	·51	·58
28	·03	·02	·01	·01	..	·01	..	..	·02	..	·01	..	..	·01	..	·01	·01	..	..	..	..	..	..	..	..	..
29	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30	·01	·01	..	·02	..	..	..	..	·02	..	·01	·02	..	..	..	..	·01	..	..	..	..	..	..	·01	..	..
31	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	2·05	2·07	2·20	2·56	2·30	1·98	2·22	2·17	2·23	1·85	1·16	1·59	1·94	1·97	1·76	2·35	2·20	2·55	2·09	1·70	1·66	1·74	2·08	1·97	2·04	1·79
†	20·17	19·96	20·64	22·06	21·70	22·98	24·09	21·83	22·07	17·82	17·18	20·86	20·81	18·55	16·24	25·05	22·03	21·96	17·03	17·95	12·67	15·15	21·76	21·02	20·36	18·12

* The figures in this row give the totals for the month. † The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for November is 2·28 in., and from 1st January 22·50 in.* **November, 1908.**

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leather-head	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..	..	..	·01	..	·01	..	·01	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..
11	·19	·18	·14	·15	·13	·16	·16	·11	·12	·12	·22	·19	·17	·28	·14	·16	·15	·12	·09	·09	·03	·12	·13	·14	·11	·16
12	·16	·18	·19	·22	·15	·11	·14	·12	·10	·10	·05	·05	·14	·12	·12	·09	·11	·15	·17	·16	·18	·12	·08	·07	·14	·09
13	·10	·05	·05	·07	·10	·12	·15	·11	·11	·13	·22	·35	·13	·26	·15	·13	·18	·08	·10	·07	·04	·16	·17	·14	·16	·25
14	..	·01	·03	·03	·04	·04	·07	·05	·04	·04	·03	·02	·01	·01	·01	·02	·05	·04	..	..	·03	·04	·03	·01	·02	·02
15	..	·01	·01	·03	·01	..	·01	·02	·02	..	..	..	·01	·01	..	..	·02	·01	..	..	·06	·01	·01	·01	·03	..
16	·05	·03	..	·05	·05	·05	·06	·04	·04	·04	·03	·07	·03	·07	·05	·06	·06	·05	·13	·09	·03	·06	·03	·05	·08	·04
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	·14	·11	·18	·12	·13	·16	·19	·15	·15	·13	·10	·11	·10	·10	·10	·12	·13	·13	·15	·12	·14	·13	·13	·10	·15	·11
19	..	·01	·01	·02	·03	..	..	·05	·05	·03	·03	..	..	..	..	..	·04	·01	..	..	..	·03	·01	..	..	·16
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..
21	·34	·33	·33	·36	·29	·29	·30	·28	·29	·28	·27	·30	·28	·29	·30	·34	·32	·23	·31	·25	·26	·27	·30	·29	·38	·27
22	..	·01	..	..	·01	·01	·02	·01	·01	..	·01	..	·04	..	..	..	·02	·01	..	·01	·03	·01	..	·01	..	·04
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·11	·09	·08	·11	·07	·10	·06	·05	·05	·10	·07	·26	·15	·19	·11	·10	·16	·09	..	·02	..	·10	·13	·13	·19	·16
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	·01	·01	..	..	·01	..	..	..	..	..	..	..	..	·03	..	·01	·01	·03	..
29	·02	..	·01	·04	·02	..	·01	..	..	·01	..	..	·01	·01	..	..	·02	..	..	..	..	·02	·02	·01	..	..
30	..	·02	·02	·04	·02	..	·02	·02	·02	·02	·02	·01	·01	·01	..	..	·02	·02	..	..	..	..	..	..	..	..
*	1·11	1·03	1·05	1·24	1·06	1·04	1·21	1·04	1·04	1·00	1·05	1·37	1·11	1·35	·98	1·02	1·28	·96	·95	·81	·83	1·07	1·05	·98	1·29	1·30
†	27·69	26·51	29·78	28·33	27·71	24·58	28·25	25·13	24·09	23·43	22·95	27·73	26·78	25·33	25·25	25·27	28·21	25·36	25·60	23·76	21·99	26·66	26·43	26·14	27·82	28·54

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for November is 2·28 in., and from 1st January 22·36 in.* **November, 1908.**

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (Place Fell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump. St.)	Sutton (Waterwk.)	Sutton (Sew. Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn. N. rd.)	Croydon (Wob. rd.)	Croydon (Park H. R.)	Croydon (Pk. H. Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..		..	..	..	·01		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..
4	..	..		..	..		..	..	..	..		·01	..	..	..	..	..	..	·02	..	..	..	..	..	..	·01
5	..	..		..	..		..	..	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	..	..		..	..		..	..	..	·02		..	..	..	..	·02	·03	·01	·01	..	·01	·02	·01	·01	·02	..
11	·17	·16		·16	·08		·07	·06	·10	·06		·07	·09	·10	·03	·05	·04	·06	·05	·06	·03	·04	·02	·04	·06	·08
12	·09	·07		·09	·07		·13	·04	·14	·13		·01	..	·12	·10	·11	·14	·09	·10	·10	·07	·10	·08	·06	·09	·10
13	·17	·15		·12	·07		·09	·17	·11	·08		·18	·20	·10	·07	·07	·09	·08	·09	·10	·07	·10	·09	·09	·09	·09
14	·19	·17		·02	..		·01	·04	·05	·05		·03	·02	..	·05	·06	·05	·02	·04	·03	·03	·03	·02	·03	·02	·03
15	..	..		·03	..		·05	..	·02	·02		·01	·01	·03	..	..	..	..	..	..	..	..	..	..	..	..
16	·06	·05		·08	..		·05	·05	·05	·05		·03	·05	·05	..	·04	·03	..	·04	·04	·03	·02	·04	·04	·06	·04
17	..	..		..	..		·01	..	..	..		..	·09	..	..	..	..	..	..	..	..	..	..	..	..	..
18	·11	·09		·09	·07		·09	·06	·12	·12		·06	·01	·08	·09	·06	·07	·09	·07	·07	·09	·08	·10	·10	·09	·08
19	..	..		..	..		·02	·06	·02	·02		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	·29	·27		·28	·25		·25	·25	·24	·23		·23	·24	·21	·21	·21	·23	·21	·22	·24	·24	·25	·24	·24	·26	·25
22	..	..		..	..		..	..	..	·02		..	..	..	..	·01	..	..	..	·01	..	·01	·01	..	·01	·01
23	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·23	·21		·11	·07		·04	·05	·04	·04		·05	·08	·07	·03	·03	·03	·04	·04	·03	·04	·03	·03	·04	·04	·04
25	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..		..	..		..	..	..	·01		..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..
29	·02	·02		..	..		..	..	..	·02		..	..	..	..	..	..	..	..	·01	..	..	..	..	·01	..	..
30	..	..		..	..		..	..	·03	·01		·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	1·33	1·19	1·08	·98	·61		·81	·78	·92	·89		·69	·81	·79	·58	·66	·71	·60	·69	·69	·61	·69	·64	·65	·75	·73
†	26·98	24·63	26·26	27·83	24·62		24·61	24·56	26·20	26·86		22·53	25·33	25·29	21·64	22·74	23·73	22·13	24·09	23·48	21·03	23·14	22·16	22·30	24·42	23·91

MONTHLY GAUGE. RECORD CEASED. RECORD CEASED.

* The figures in this row give the totals for the month. † The totals from January 1st.

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump.St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (TheDowns)	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (CountyH.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	·01	·02	·01	..	..	..	·02	·01	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..
5	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·02	·01	..	..	..	..	..	·01	..	·02	..	..	·01	..	..	..	..	·03	..	..	..	·01	..	..	..	·02
11	·07	·07	·08	·09	·08	·13	·09	·05	·03	·05	·07	·04	·03	·05	·10	·07	·08	·06	·06	..	·06	·05	·07	·08	·08	·06
12	·10	·09	·06	·09	..	..	·05	·03	·05	·06	..	·04	·06	·08	·13	·08	·10	·09	·08	·20	·15	·06	·10	·11	·09	·13
13	·12	·12	·13	·10	·17	·16	·07	·17	·08	·12	·15	·18	·08	·10	·07	·03	·04	·03	·03	·05	·03	·07	·03	·03	·05	·03
14	·03	·02	..	..	..	..	..	·03	..	..	..	..	..	·01	..	·07	·05	·04	·05	·05	·04	..	·05	·05	·04	·06
15	·01	·01	·01	·01	..	..	·02	·01	·01	·02	..	..	..	..	..	..	..	..	..	..	..	·03	..	..	..	..
16	·04	·07	·07	·06	·07	·08	·07	·04	·08	·05	·06	·06	·04	·05	..	·03	·04	·02	·01	·04	·02	·01	·05	·02	·02	·02
17	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	·08	·08	·07	·13	·25	·17	·21	·13	·09	·14	·37	·30	·13	·43	·14	·32	·16	·11	·05	·06	·05	·05	·05	·05	·05	·21
19	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	·01	..	..
20	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	..	..	..
21	·26	·24	·24	·27	·23	·23	·20	·21	·20	·22	·20	·22	·21	·23	·23	·23	·25	·23	·19	·23	·20	·20	·21	·23	·22	·21
22	·02	·01	..	..	·04	·03	·03	·01	·02	·04	·04	·02	..	..	..	·01	·01	..	..	..	..	..	·01	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..
24	·05	·06	·08	·07	·08	·08	·05	·06	·04	·04	·06	·05	·04	·04	·05	·05	·04	·02	·01	·03	·02	·02	·03	·03	·02	·04
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	..	·01	..	..	..	..	..	·02	..	·01	..	·02	..	·01	..	·02	·04	·04	·02	..	·02	..	·03	·04	·03	·03
30	·01	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	·84	·88	·76	·82	·92	·88	·81	·78	·60	·77	·95	·93	·60	1·00	·72	·92	·83	·67	·50	·66	·59	·53	·63	·65	·60	·81
†	24·98	24·42	24·33	25·39	24·43	26·46	23·78	18·80	21·58	22·31	21·51	25·49	22·73	24·90	23·60	19·70	23·57	21·56	20·52	21·40	20·29	20·80	21·62	24·08	22·91	18·95

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for November is 2·28 in., and from 1st January 22·36 in.* **November, 1908.**

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandswth. Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	..	..	..	..	..	·01	..	·02	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10	·01	·01	·01	·01	..	·01	·05	·02	·01	..	..	..	..	..	..	·01	..	..	..	..	..	..	·03	·01	..	..
11	·07	·07	·08	·08	·05	·05	·02	·05	·05	·05	·04	·04	·03	·04	·05	·06	·06	·08	·20	·07	·02	·06	·06	·05	·06	·05
12	·11	·12	·08	·04	·07	·11	·08	·07	·07	·08	·01	·05	·05	·06	·07	·10	·09	·09	·15	·03	·02	·06	·08	·05	·04	·05
13	·04	·06	·04	·06	·10	·07	·13	·12	·12	·09	·11	·13	·13	·10	·10	·14	·05	·05	·21	·07	·09	·09	·13	·12	·11	·04
14	·04	·04	·05	·02	·02	·02	..	..	·01	..	·01	..	..	·03	·04	..	..	..	..	·01	·03	·05	·05	·05	·02	·06
15	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..
16	·02	·01	·03	·03	·03	·05	·05	·05	·04	·03	·04	·07	·06	·02	·01	·03	·03	·02	..	·02	·03	·02	·05	·04	·02	·01
17	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	·02	..	..	..	..	..	..	..	..	..	..	..
18	·12	·14	·14	·13	·18	·15	·15	·10	·10	·11	·14	·14	·28	·09	·07	·10	·10	·08	·16	·12	·12	·20	·13	·14	·27	·13
19	..	..	..	·07	·06	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20	..	..	..	·01	..	..	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	·24	·25	·22	·24	·22	·24	·19	·23	·20	·22	·19	·22	·21	·18	·18	·25	·20	·21	·19	·18	·18	·18	·22	·22	·25	·20
22	..	..	..	·01	..	·01	·04	·02	·03	·02	·01	..	..	·03	..	..	..	..	..	..	..	·04	·05	·01	..	·03
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	·03	·03	·14	·13	·06	·10	·10	·10	·11	·11	·08	·12	·11	·11	·10	·08	..	·03	·10	·03	·04	·03	·08	·06	·04	·05
25	..	..	..	..	..	..	·01	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29	·03	·03	·02	·01	·02	·02	..	·02	·02	..	·01	·01	..	·01	·01	·02	·09	·03	..	·01	..	..	·03	·01	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
*	·71	·76	·81	·84	·81	·84	·83	·80	·80	·72	·66	·78	·87	·67	·65	·79	·63	·59	1·01	·54	·53	·73	·91	·76	·81	·62
†	20·88	20·72	21·45	22·90	22·51	23·82	24·92	22·63	22·87	18·54	17·84	21·64	21·68	19·22	16·89	25·84	22·66	22·55	18·04	18·49	13·20	15·88	22·67	21·78	21·17	18·74

* The figures in this row give the totals for the month. † The totals from January 1st.

NOTES.

NOVEMBER, 1908.

The month has been remarkable for its sunniness, great warmth, and dryness. It is the driest November for over twenty-five years, with the single exception of 1901, and it is one of the warmest Novembers for twenty-three years, with the four exceptions of 1888, 1894, 1895, and 1899, and the mean maximum temperature in the shade, 52°·3, has only been exceeded twice in this period, *viz.*, in 1895 and 1899. As may be imagined, the month has been a very unhealthy one, diphtheria, scarlet fever, and typhoid being prevalent in many parts. Fogs have been somewhat prevalent during the first and last third of the month in some parts, and there were a few cold days about the 8th, 9th, and 10th, with slight snow at 10.30 p.m. on the latter day at Wallington. Dr. Franklin Parsons mentions that in Croydon dahlias and other tender plants were killed by the frost on the night of the 7th and 8th; whilst Mr. J. E. Clarke, of Purley, mentions that "forty-one wild flowers were at the end of the month still in bloom, and forty-six in own garden, besides thirty-seven kinds of roses"; and the observer at Outwood mentions that gorse and primroses were in flower, and the observer at Nutfield Priory remarks on the colouring of various trees, such as the maple, oak, viburnum, beech, hardy azalea, sumach, and larch; and the observers at Abinger, Redhill, and West Wickham refer to the singing of birds. Solar haloes were seen at Greenwich on the 2nd, 7th, 13th, 18th, 24th, and 25th; at Epsom on the 1st, 2nd, 7th, and 24th; and at Upper Gatton on the 7th: whilst lunar ones were observed at Greenwich on the 6th, 7th, and 14th; at Epsom on the 1st, 7th, 10th, 12th, and 13th; and at Croydon (Waddon New Road) on the 7th. The rainfall of the month is just two inches below the average, and the number of rainy days about five below. The mean temperature of the month is about 2°·1 above average, and was at Wallington 46°·4, at Worcester Park 46°·3 at Croydon (Park Hill House) 46°·0, at Epsom 45°·3, and at Warlingham 45°·2. At Croydon (Park Hill House) evaporation was ·570 in., which is ·149 in. above the average; whilst percolation through the chalk gauge was only ·4958 in., which is nearly one inch below the average, and there was no percolation through the gravel gauge. There were recorded at Wallington, 84·9 hours of sunlight, which is 34·0 hours, or thirteen per cent. above the November average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

Wallington, Surrey, *December 15th, 1908.*

NOTES.

DECEMBER, 1908.

The month has been an extraordinary one. It was dull at the beginning, the 1st to 7th being sunless, then mild and wet till the 20th, then from the 21st to 26th cold with a north-easterly wind, then from the 27th to 30th snow and frost, with a very rapid thaw on the 31st. The snow averaged in depth at Nutfield 8 in., at Hedley and Merstham 6 in., at Kew 5 in., at Betchworth and Croydon (Avondale Road) 4½ in., at Epsom 4 in., at Redhill 3½ to 4 in., at Purley 3 to 3½ in., and at Wallington 3 in. The lowest shade temperatures occurred on the 29th and 30th, and were on the 29th 10° at Warlingham and Benhilton, and 12° at Nutfield; and on the 30th 0°·0 at Abinger, 3°·2 at Beddington, 4°·0 at Epsom, 7°·5 at Croydon (Park Hill House), 10°·0 at Warlingham, 10°·8 at Worcester Park, 11°·7 at Wallington, 12°·0 at Croydon (Avondale Road) and Nutfield, and 12°·1 at Greenwich. It may be mentioned that at Wallington since 1885 the shade minimum temperature has only been six times lower, and only once in December, *viz.* in 1890; and the grass minimum 3°·3 on the 31st has never been so low in December, and only once lower, *viz.* in 1895. At Epsom the grass minimum fell to −8°·0 on the 30th. There was thunder and lightning at Nutfield on the 3rd, and lightning only at Beddington on the 10th, and Epsom on the 17th. In some parts of the district there have been numerous cases of diphtheria and scarlet fever, and the month generally has been unhealthy. The *Cydonia Japonica* bloomed at Kew on the 20th. The observer at West Wickham remarks on the scarcity of holly-berries and the abundance of whitethorn ones. A solar halo was seen at Greenwich and Epsom on the 9th; and lunar haloes at Epsom on the 5th, 10th, 14th, 16th, 30th, and 31st, and at Greenwich and Beddington on the 5th. The rainfall of the month is about the average. The mean temperature of the month is about 0°·5 above the average, and was at Wallington 39°·7, at Worcester Park 39°·6, at Epsom 39°·4, and at Warlingham 38°·0. At Croydon (Park Hill House) evaporation was ·485 in., and the percolation through the chalk gauge 1·88 in., and were above the average. There were recorded at Wallington 18·6 hours of sunlight, which is 19·2 hours, or eight per cent., below the December average of the twenty years 1886–1905.

F. Campbell-Bayard, F.R.Met.Soc.,
Hon. Sec.

Wallington, Surrey, *January 19th, 1909.*

BRITISH MUSEUM NATURAL HISTORY
PRESENTED
11 FEB. 1910

Day of Mo.	Holmbury St. Mary	Abinger (Rectory)	Abinger (The Hall)	Dorking (Denbies)	Betchworth	Buckland	Redhill	Nutfield (old gauge)	Nutfield (new gauge)	South Nutfield	Outwood	Betsom Hill	Sevenoaks	Westerham (Hill Est.)	Westerham (Town)	Merstham	Upper Gatton	Walton-on-the-Hill	Hedley	Leatherhead	D'Abernon Chase	Chipstead	Chaldon	Caterham (Asylum)	Caterham (Reservoir)	Chevening Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	·01	..	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
2	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	..	..	..	..
4	·12	·07	·09	·07	·07	·09	·07	·05	·05	·06	·05	·07	·05	·06	·07	·10	·08	..	·12	·07	·06	·08	·06	·05	·09	·09
5	·04	·05	·05	·04	·04	·03	·05	·03	·03	·03	·01	..	·02	·01	..	·03	·03	·09	·05	·04	·18	·03	·02	·02	·03	·14
6	·20	·18	·22	·23	·21	·18	·19	·17	·17	·16	·20	·20	·17	·16	·16	·17	·20	·20	·20	·18	·05	·21	·21	·21	·22	·06
7	..	..	·01	..	·01	..	..	·01	·01	·01	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..
8	·43	·51	·47	·42	·46	·23	·25	·19	·19	·23	·24	·20	·20	·17	·18	·21	·37	·51	·48	·33	·20	·49	·30	·27	·29	·21
9	·33	·26	·38	·35	·27	·30	·32	·20	·25	·24	·20	·19	·21	·19	·25	·25	·25	·23	·30	·27	·25	·27	·27	·23	·25	·33
10	·35	·31	·33	·33	·27	·25	·25	·20	·25	·23	·26	·27	·25	·27	·21	·23	·29	·28	·24	·28	·20	·32	·22	·23	·22	·19
11	..	..	..	..	..	..	·01	·01	..	..	..	·01	·02	..	·01	..	..	..	..	..	..	..	..	..	..	·01
12	·04	·14	·18	·14	·15	·18	·19	·18	·20	·17	·17	·22	·24	·23	·24	·17	·15	·19	·15	·14	·15	·19	·20	·23	·18	·22
13	·34	·19	·28	·16	·20	·28	·24	·33	·32	·31	·23	·41	·52	·43	·53	·24	·23	·22	·18	·20	·10	·18	·28	·22	·29	·39
14	·62	·50	·63	·40	·34	·53	·42	·31	·28	·27	·44	·35	·55	·33	·35	·30	·22	·26	·32	·31	·36	·37	·34	·34	·33	·41
15	·06	·03	·03	·04	·09	·20	·17	·22	·25	·17	·11	·07	·06	·03	·07	·28	..	·07	..	·02	..	·17	·19	·21	·29	·11
16	·11	·12	·13	·11	·13	·13	·11	·06	·08	·07	·08	·09	·09	·08	·09	·06	·10	·12	·04	·06	·04	·12	·09	·08	·09	·08
17	·10	·11	·16	·16	·12	·08	·10	·08	·08	·10	·11	·10	·14	·08	·14	·09	·12	·14	·20	·10	·21	·12	·10	·14	·12	·19
18	·04	·09	·03	·02	·01	·01	·02	·02	·02	·01	·02	·02	·02	..	..	·01	·01	..	..	..	..	·04	·01	·02	·02	..
19	·24	·13	·19	·16	·18	·13	·16	·11	·13	·11	·11	·13	·11	·12	·12	·12	·14	·10	·15	·15	·10	·13	·09	·10	·09	·13
20	·04	·02	·01	·03	·03	·02	·03	·02	·02	·01	·01	·01	·03	·03	·02	·02	·04	·02	·02	·02	·01	·03	..	·02	..	·16
21	..	..	..	..	·01	..	·01	·01	·01	·01	..	..	..	..	..	..	·01	..	..	..	..	·01	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	·01	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	·01	·01	·01	·01	..	..	..	·01	..	..	..	..	..	..	..	..	..	·01	..	..
27	..	·02	·03	..	..	..	·01	..	..	..	·01	·01	..	·01	·02	..	..	..	..	..	..	·03	..	·03	..	·04
28	·15	·10	·07	..	·04	..	·12	·02	·05	·04	..	·07	..	·07	·08	..	..	..	..	·02	..	·04	·07	·04	·02	·01
29	·34	·45	·52	·36	·33	·53	·37	·40	·37	·39	·45	·25	·47	·25	·24	·48	·31	·39	·41	·40	·28	·40	·28	·46	·32	·47
30	..	·01	·01	..	·03	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31	·20	·08	·11	·13	·17	·14	·18	·13	·17	·15	·13	·14	·10	·09	·06	·11	·14	..	..	·07	·08	·10	·09	·11	·12	·12
*	3·75	3·37	3·94	3·15	3·18	3·32	3·28	2·78	2·95	2·78	2·83	2·81	3·25	2·62	2·84	2·87	2·69	2·82	2·86	2·66	2·27	3·37	2·82	3·02	2·97	3·36
†	31·44	29·88	33·72	31·48	30·89	27·90	31·53	27·91	27·04	26·21	25·78	30·54	30·03	27·95	28·09	28·14	30·90	28·18	28·46	26·42	24·26	30·03	29·25	29·16	30·79	31·90

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for December is 1·96 in., and from 1st January 24·32 in.* **December, 1908.**

Day of Mo.	Knockholt (field gau.)	Knockholt (tower ga.)	Chelsham	Warlingham	Kenley (Hazelea)	Kenley (PlaceFell)	Banstead (The Hall)	Banstead (Basing H.)	Burgh Heath	Epsom	Sanderstd. (Red Ho.)	Sanderstd. (Beech. rd.)	Purley (Riddl. rd.)	Purley (Pump.St.)	Sutton (Waterwk.)	Sutton (Sew.Wks.)	Benhilton	Carshalton	Wallington	Beddington (Riverside)	Beddington (Sew. Fm.)	Croydon (Wn.N.rd.)	Croydon (Wob.rd.)	Croydon (ParkH.R.)	Croydon (Pk.H.Ho.)	Croydon (Bram. H.)
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	·04	·03		·06	·04		·10	·06	·07	·05		·03	·05	..	·04	·02	·04	·04	·04	·03	·03	·04	·04	·03	·05	·04
5	..	..		·03	·02		·04	·03	·03	·04		·02	·01	..	..	·03	·02	·02	·03	·02	·03	·04	·02	·01	·02	..
6	·25	·23		·20	·17		·15	·16	·16	·16		·14	·28	·22	·16	·14	·14	·12	·15	·14	·11	·10	·14	·12	·13	·14
7	..	..		..	..		·01	..	·01	·01		..	..	..	..	..	..	..	·01	..	·01	..	..	..	..	..	..
8	·19	·17		·28	·38		·39	·39	·44	·35		·47	·32	·48	·32	·25	·26	·28	·30	·30	·28	·38	·33	·31	·45	·45
9	·45	·41		·28	·26		·18	·19	·34	·31		·29	·27	·34	·25	·23	·26	·24	·27	·26	·28	·28	·34	·24	·28	·31
10	·15	·12		·26	·24		·27	·28	·26	·19		·28	·30	·24	·17	·12	·16	·16	·21	·20	·16	·20	·17	·17	·18	·21
11	..	..		..	..		..	..	..	..		..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	·01
12	·22	·21		·24	·16		·15	·13	·16	·14		·12	·13	·13	·12	·02	·13	·11	·13	·13	·11	·14	·12	·11	·12	·13
13	·43	·42		·25	·20		·18	·16	·18	·17		·10	·11	·10	·13	·22	·12	·13	·15	·12	·14	·11	·10	·09	·10	·09
14	·17	·15		·34	·29		·27	·24	·29	·30		·22	·23	·24	·12	·25	·19	·15	·21	·24	·18	·27	·22	·20	·22	·23
15	·33	·31		·26	·20		·06	·07	·07	·03		·17	·21	·18	..	·03	..	..	·04	·05	·02	·05	·05	·08	·09	·09
16	·08	·06		·09	·08		·12	·09	·14	·08		·08	·10	·11	·05	·06	·06	·05	·10	·11	·07	·10	·09	·06	·09	·09
17	·15	·14		·13	·11		·15	·16	·16	·18		·12	·14	·15	·14	·20	·21	·15	·12	·13	·10	·14	·13	·11	·12	·12
18	..	..		·02	·02		·01	·02	..	·02		..	..	..	..	·03	..	..	..	..	..	·02	..	..	..	..
19	·03	·02		·12	·07		·06	·07	·09	·06		·06	·01	·07	·05	·01	·05	·05	·06	·07	·05	·06	·07	·07	·07	·08
20	..	..		·02	..		·04	·02	·02	..		·12	·01	·01	..	·06	..	..	·01	·01	..	..	·01	..	..	·01
21	..	..		..	..		..	..	..	·01		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..		..	..		..	..	..	..		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..		..	..		..	..	..	·01		·01	·01	..	..	..	..	..	·01	..	..	..	..	..	·01	..
27	·19	·17		·04	·02		·01	·02	..	·02		·02	·02	..	·03	..	·04	..	·02	·03	..	·05	·06	·06	·06	·06
28	·03	·02		..	·02		..	..	..	·10		·01	..	·02	..	·08	..	..	·02	·01	·01	·05	·05	·05	·04	·04
29	·27	·25		·46	·33		·42	·42	..	·33		·26	·23	·35	·31	·42	·43	·15	·24	·42	·18	·32	·35	·26	·31	·31
30	..	..		..	..		..	..	·09	·02		..	..	..	..	..	..	..	·02	·01	..	..	..	..	..	..	..
31	·11	·09		·08	·05		·05	·06	·23	·05		·04	·05	·11	·03	·05	·04	·03	·04	·04	..	·05	·05	·13	·06	·06
*	3·09	2·80	2·25	3·16	2·66		2·66	2·57	2·74	2·63		2·56	2·49	2·75	1·92	2·22	2·15	1·68	2·18	2·32	1·76	2·40	2·34	2·10	2·40	2·47
†	30·07	27·43	28·51	30·99	27·28		27·27	27·13	28·94	29·49		25·09	27·82	28·04	23·56	24·96	25·88	23·81	26·27	25·80	22·79	25·54	24·50	24·40	26·82	26·38

MONTHLY GAUGE.

RECORD CEASED.

RECORD CEASED.

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for December is 1·90 in., and from 1st January 22·82 in.* **December, 1905.**

Day of Mo.	Croydon (Avond.rd.)	Addington Hills	Addington (Pump.St.)	West Wickham	Hayes	Keston	Orpington	Southfleet	Chislehurst	Bromley	Bromley Common	Beckenham	Anerley	South Norwood	Beddington Corner	Wimbledon (Sew.Wks.)	Wimbledon (The Downs)	Raynes Park	New Malden	Worcester Park	Esher	West Molesey	Surbiton	Kingston (Sew.Wks.)	Kingston (County H.)	Richmond
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	·04	·03	·02	·03	·05	·03	·03	·04	·04	·05	·04	·06	..	·04	·05	·05	·07	·06	·06	·07	·06	·07	..	·08	·08	·06
5	·03	·02	·02	·02	..	·02	·02	·01	·02	·05	·01	·02	·01	·03	·02	·02	·03	·02	·10	·02	·02	·03	·03	..	·03	·02
6	·13	·12	·14	·15	·14	·12	·18	·17	·10	·10	·09	·15	·11	·13	·12	·12	·17	·15	·10	·18	·16	·18	·16	·21	·18	·17
7	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	·01	·01	..
8	·49	·51	·37	·38	·38	·26	·21	·13	·27	·42	·33	·48	·28	·30	·28	·15	·16	·15	·12	·18	·18	·16	·13	·21	·18	·14
9	·30	·30	·32	·42	·40	·45	·30	·12	·25	·24	·26	·32	·18	·20	·24	·15	·16	·16	·13	·20	·10	·15	·14	·14	·10	·12
10	·25	·23	·25	·22	·16	·11	·16	·15	·13	·11	·14	·20	·14	·15	·15	·14	·12	·13	·12	·14	·12	·15	·12	·11	·20	·14
11	..	..	..	..	..	..	..	·01	..	..	..	..	..	·01	..	..	·01	..	..	..	..	..	·01	..	..	..
12	·13	·12	·13	·13	·12	·13	·10	·12	·10	·07	·11	·12	·10	·11	·11	·14	·14	·13	·13	·15	·12	·13	·13	·14	·15	·15
13	·10	·11	·17	·17	·17	·16	·17	·20	·16	·12	·19	·11	·14	·14	·11	·08	·10	·09	·05	·09	·03	·03	·05	·03	·05	·03
14	·22	·25	·27	·27	·26	·26	·25	·15	·21	·23	·19	·25	·20	·22	·16	·25	·31	·28	·24	·31	·30	·45	·23	·23	·23	·35
15	·11	·16	·19	·19	·11	·24	·15	·07	·08	·09	·12	·12	·03	·04	..	..	·01	..	..	..	..	..	..	..	..	..
16	·06	·06	·06	·05	·06	..	·08	·05	·03	·03	·04	·06	·07	·08	·04	·05	·05	·05	·04	·04	·04	·04	·05	·04	·04	·05
17	·24	·14	·10	·10	·10	·08	·04	·11	·06	·12	·07	·11	·12	·14	·19	·14	·13	·11	·09	·15	·06	·05	·09	·08	·10	·06
18	·01	..	..	..	..	..	..	·03	..	..	..	·02	..	..	..	..	·01	·01	..	..	..	..	·01	..	..	..
19	·07	·08	·07	·07	·07	·07	·06	·05	·07	·07	·07	·06	·06	·08	·05	·08	·07	·07	·06	·07	·09	..	·06	·07	·15	·09
20	·01	·01	·01	..	..	..	·01	·01	..	·01	..	..	..	..	..	..	·01	..	..	..	..	..	·01	..	·01	·01
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·05	·07	·05	·08	..	·09	·05	·07	·11	·11	..	·16	..	·08	..	·03	..	·03	..	·03	..	..	..	..	..	..
28	..	·04	·02	..	..	..	·03	..	..	..	..	·08	..	·03	·02	·05	..	·05	..	..	·02	·04	·06	·05	..	..
29	·35	·33	·30	·47	·50	·38	·23	·26	·39	·33	·51	·56	·43	·33	·30	·29	·22	·28	·18	·42	·30	·22	·32	·11	·25	·50
30	..	·03	..	..	..	..	..	..	..	..	..	..	..	..	..	·02	..	..	..	..	..	..	·02	..	..	..
31	·06	·06	·07	·05	·07	·07	·03	·02	·05	·06	·05	·07	·06	·06	·05	·06	·08	·07	·04	·05	·06	·07	·05	·08	·06	·08
*	2·65	2·68	2·56	2·80	2·59	2·47	2·10	1·77	2·07	2·21	2·22	2·95	1·93	2·17	1·89	1·82	1·85	1·84	1·46	2·10	1·66	1·77	1·67	1·59	1·82	1·97
†	27·63	27·10	26·89	28·19	27·02	28·93	25·88	20·57	23·65	24·52	23·73	28·44	24·66	27·07	25·49	21·52	25·42	23·40	21·98	23·50	21·95	22·57	23·29	25·67	24·73	20·92

* The figures in this row give the totals for the month.

† The totals from January 1st.

Daily Rainfall. *Greenwich average 90 years (1815–1904) for December is 1·96 in., and from 1st January 24·32 in.* **December, 1908.**

Day of Mo.	Kew (Kew G.rd.)	Kew (Cumb. G.)	Putney Heath	Wandsworth Common	Streatham	West Norwood	Upper Norwood	Forest Hill (Dartm.rd.)	Forest Hill (Hon.O.rd.)	Forest Hill (Cemetery)	Wilmington	Dartford	Eltham	Nunhead	East Dulwich	Brockwell Park	Clapham Park	Battersea Park	Battersea (Waterwk.)	Cambe'well (TheGreen)	Cambe'well (Town Ha.)	Cambe'well (Leytonsq.)	Telegraph Hill	Greenwich	Deptford	Southwark Park
	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.	IN.
1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4	·09	·08	·05	·06	·05	·07	·07	·05	·05	·05	·04	·05	·05	·05	·05	·04	·05	·09	·20	·04	·06	·05	·07	·07	·05	·04
5	·03	·03	·03	·02	·02	·02	·03	·02	·02	·01	·02	·02	·04	..	·02	·02	·06	·03	·02	·01	·01	·01	·03	·01	..	..
6	·18	·19	·14	·15	·14	·13	·14	·13	·12	·13	·13	·13	·11	·11	·11	·15	..	·16	·37	·14	·10	·15	·14	·13	·18	·12
7	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
8	·11	·11	·19	·17	·21	·24	·30	·29	·27	·24	·17	·21	·39	·19	·19	·25	·26	·18	·32	·14	·14	·14	·22	·21	·20	·14
9	·11	·16	·12	·05	·10	·17	·18	·20	·14	·13	·18	·22	·18	·05	·11	·14	·12	·12	·22	·11	·13	·12	·15	·13	·12	·11
10	·18	·18	·13	·18	·15	·17	·17	·14	·15	·13	·10	·10	·14	·10	·13	·15	..	·13	·21	·12	·10	·10	·16	·14	·12	·07
11	..	..	..	·03	..	..	..	..	·01	..	·01	..	..	..	..	..	..	..	..	..	·01	..	..	..	..	..
12	·16	·16	·15	·12	·13	·13	·15	·06	·14	·15	·12	·17	·15	·14	·14	·15	·25	·18	·15	·19	·09	·16	·18	·17	·16	·12
13	·06	·06	·04	·06	·11	·16	·20	·30	·17	·20	·21	·27	·11	·12	·12	·14	·09	·07	·13	·06	·06	·07	·14	·15	·13	·04
14	·52	·46	·21	·42	·19	·19	·17	·15	·18	·16	·13	·18	·20	·12	·15	·23	·25	·32	·38	·26	·07	·18	·19	·20	·18	·20
15	..	..	..	..	..	·01	·02	..	·02	·01	·04	·03	·05	·01	..	..	·01	..	·02	..	..	·01	·02	·02	..	..
16	·05	·05	·04	..	·07	·06	·07	·03	·10	·07	·04	·07	·03	·10	·07	·07	·11	·07	·13	·11	·06	·06	·12	·10	·13	·08
17	·08	·10	·08	·08	·18	·18	·14	·20	·14	·13	·04	·06	·12	·15	·10	·19	·10	·08	·17	·08	·08	·07	·18	·11	·11	·08
18	..	·01	..	..	..	..	..	..	·01	..	·01	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	·08	·10	·09	·05	·07	·08	·09	..	·06	·06	·06	·07	·06	·06	·05	·09	·08	·10	·07	·07	·06	·06	·09	·08	·06	·03
20	·01	·01	·01	..	..	..	..	..	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27	·05	·05	·04	·04	·04	·06	·07	·02	..	..	·09	·18	·11	..	..	·08	·06	..	..	..	..	..	..	·08	·08	·14
28	·02	·02	..	·01	..	·02	..	·05	..	..	..	..	·02	..	..	..	·12	..	..	..	..	..	..	·01	·02	·02
29	·32	·46	·30	·31	·21	·36	·40	·24	·10	..	·25	·36	·27	·08	..	·80	·21	·46	..	..	..	·01	..	·31	·34	·32
30	..	·02	..	..	..	..	..	..	..	·08	..	..	..	..	·13	..	·02	..	·05	·09	·02	..	..	..	..	..
31	·08	·08	·08	·08	·05	·07	·09	·06	·06	·33	·03	·02	·08	·05	·18	·05	·04	·05	·10	·41	·05	·33	·35	·08	·08	·01
*	2·14	2·34	1·70	1·83	1·72	2·12	2·29	1·94	1·75	1·88	1·67	2·15	2·11	1·33	1·55	2·55	1·83	2·04	2·54	1·83	1·04	1·52	2·04	2·00	1·96	1·52
†	23·02	23·06	23·15	24·73	24·23	25·94	27·21	24·57	24·62	20·42	19·51	23·79	23·79	20·55	18·44	28·39	24·49	24·59	20·58	20·32	14·24	17·40	24·71	23·78	23·13	20·26

* The figures in this row give the totals for the month. † The totals from January 1st.

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Croydon Natural History and Scientific Society.

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